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A Publication
of the
Ontario Institute
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Ideas
about Teaching
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# ORBIT 4

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(18 minutes)
A description of various aspects of the pulp and paper industry and its relationship to the economic and social development of Canada.

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> "I must speak about medical matters and drugs, but Phoebus shows that they are harmful if taken too often. In order that a man be kept entirely healthy this chapter is added so that the mind may be purified and the body strengthened. Nutmeg may be taken as well as cloves, musk may be given, fennel may be eaten by anybody; they expel gas from the stomach and thus, along with the triple compartments of the brain, they comfort the cerebellum. By means of cooked pears you can take away fevers with marvellous results. Pliris is good for weak and melancholy men. The thin flux (usia) is cured by means of diapenidia. Ygia is good for rheumatics, athanasia for flux of the bowels. Give diaciminum and sweet wine to those who have indigestion. Justinum and goat's blood dissolve stone in the bladder. Diaprunis makes you immune to fevers; when given to patients who have fasted, a decoction with prunes from Damascus allays fevers. A sane diet is essential to a life of happiness; thus you will be strong and vigorous when health, the aim of the physician, is yours."

From 'How the Student Should Behave'
John of Garland, Thirteenth Century

# The Ideal Nongraded School

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College of Education,
University of South Florida

After several decades of implementing nongraded practices and establishing nongraded schools, of investigating the effects of these schools and theorizing about them, the nongraded movement can best be characterized as vague, confused, shallow, and inconsistent. It seems that nongraded schools mean different things to different people in different, and even in the same, situations. And unfortunately, because many educators have lacked an adequate definition, they have rushed from one highly publicized endeavor to another in an attempt to capture the 'true' meaning of nongradedness. Still uncertain of the goal, they proceed to implement and evaluate a smorgasbord of new practices before being completely clear about what it is that should be implemented and evaluated. This problem has resulted in many educators accepting whatever schools label 'nongraded' as being a definition of the nongraded school. Consequently, the nongraded school is presently defined as what is in operation, and conflicting operational models naturally result in conflicting definitions.

If we accept what is essentially a potluck approach to nongradedness it is doubtful that the inherent potential of the concept of nongradedness will be realized. Only by carefully defining what a nongraded school *should be* and then using this definition to assess attempts to establish nongraded schools are we likely to improve education through this particular type of schooling.

### Formulating an Adequate Definition of the Nongraded School

First, we need to decide whether nongraded schools are to be characterized by a particular method of organizing students for learning or by a number of distinctive features *in addition* to the organizational plan. Clues to resolving this problem might come as a result of examining the graded school. Schools identified as graded have a plan of organization based on grades and also seem to be characterized by a particular function, that is, developing literacy. In addition, they are distinguished by certain curricular and instructional procedures and by specific beliefs with regard to the role and responsibilities of the learner. Perhaps then it would be best to develop a definition of the nongraded school that refers to a total concept of schooling since the same beliefs, values, and assumptions that dictate a school's organizational scheme also dictate a type of operation with regard to function, curriculum, instruction, evaluation, and role of the learner.

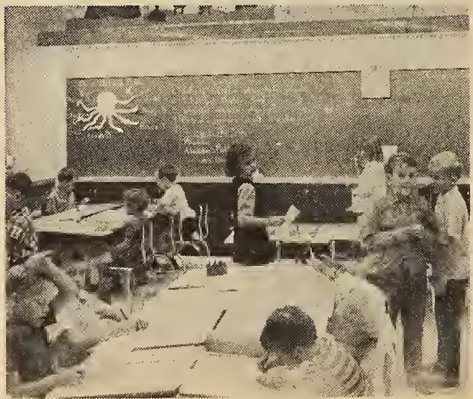
The first step in arriving at a comprehensive definition is to identify a few highly important values. What is good and important to a person is of utmost significance when making decisions about educational direction. One value this author identified and used to define the nongraded school is *respect for the worth and dignity of every individual;* in other words, every individual is important and individual differences should be accepted. Another value is *encouragement of variability,* meaning that a wide variety of interests, skills, and abilities should be developed in the members of a society. Other values were identified and used.

To make realistic decisions regarding the nature of schooling, one must also consider data relevant to the conduct of education. Values alone are not enough for decision making. Three types of information considered by educators to be relevant to school follow.

1) *Information about our culture*: Because the learner functions in the context of the group, and because group living makes certain demands on him and creates an environment that greatly influences him, it is important to consider information about societal conditions, trends, and influences.

2) *Information concerning organized knowledge*: Because man's progress is usually based on what has been previously learned, it is important to consider information regarding organized knowledge or subject matter.

3) *Information about the learner*: Since the purpose of an educational program is to promote learning, and since learning is, in the final analysis, dependent on the learner, it is important to know as much as possible about human growth and development and how humans learn.


Centennial Public School in Kingston – where nongrading was gradually adopted from the lower levels up

By combining the values with the data from these three types of information, a set of propositions or descriptive statements concerning the nature of a nongraded school can be formulated. Collectively, the statements represent a viable definition or conceptual model of the nongraded school.

The propositions that the author originally formulated as a result of synthesizing the values identified with the information collected were grouped in general categories and analyzed for clarity and possible repetition. Some of the propositions and categories were then eliminated, combined, and/or revised. After several such analyses, eleven propositions remained. These eleven propositions could be classified into the six categories that follow.

*School Function* — This category refers to the purpose that a school serves, meaning the effect a school operates to produce or the ultimate outcome of a school. More specifically–what is the purpose of a nongraded school?
*Curriculum* — This category refers to the type of curriculum design or pattern that a school adopts.
*Instruction* — This category refers to the manner in which the learner will be taught. Although we usually think of this as the role of the teacher, another aspect of this category is the rationale for a system of providing learning opportunities.
*Evaluation* — This category refers primarily to collecting and appraising data.
*Organization* — This category refers to the type of plan or design that should be implemented for moving learners through the school and deploying them at any given point in time. This is the category most frequently discussed in the literature connected with nongraded schools.
*Role of the Learner* — This category deals with the expectations we have for the learner, that is, what we expect the child to do in the nongraded school.

While perhaps not agreeing with the propositions relating to these six categories, the reader would probably concede that the categories themselves are necessary in the consideration of a broad picture of schooling.

Following are briefly stated conclusions regarding each of these six dimensions of schooling as they pertain to a nongraded school.

## A Conceptual Model of the Nongraded School

*School Function*
1) The school assists each learner in developing his potential to the maximum.

*Curriculum*
2) The curriculum emphasizes the development of the broad structural concepts and modes of inquiry in the disciplines.

*Instruction*
3) Learning opportunities are provided on the basis of individual needs, interests, and abilities.
4) All phases of human growth are considered when making decisions about how to work effectively with a learner.
5) Learning opportunities are paced so that each child can progress in relation to his own rate of development in each area of the curriculum.

*Evaluation*
6) An evaluation of all phases of human growth is made for each individual.
7) Evaluation of each learner's progress is carried on almost constantly.
8) The adequacy of each child's progress is an individual matter determined by appraising his attainments in relation to estimates of his potential.

*Organization*
9) The school is organized to facilitate continuous and cumulative learning for each learner throughout his schooling.
10) The school is so structured that there are alternate learning environments available to the individual and alternate opportunities within these environments to progress at different rates and work at different levels in each area of the curriculum.

*Role of the Learner*
11) Each learner uses his own interests and needs to establish the objectives he will pursue.

**Comments about the Model**
*School function,* the first category in the model, is one of the two key categories. It raises the question of the ultimate purpose of nongraded schools. Is it the primary purpose of nongraded schools to develop literacy? No. Does a nongraded school exist merely to develop critical thinking? No, it does not. Is self-direction the sole purpose of a nongraded school? Again, the answer is no. The function of a nongraded school is to assist each learner in developing his maximum potential. It is highly conceivable that a school could produce learners who are literate, who think critically, and who are self-directive but who are not developing their potential to the maximum. Reading and writing, critical thinking, and self-direction no doubt facilitate the development of potential, but in the nongraded school they become the means to a more significant end.

University Elementary School at the University of California in Los Angeles – one of the pioneer schools in nongrading

Attempting to maximize potential is a lifelong process – not something to be achieved within a prescribed length of time. After formal schooling ends, the learner will still be involved in the process of developing those potentialities that reside within him. In order to do this successfully, the individual must learn to be responsible for and capable of developing himself throughout life. In other words, he must learn to be a self-actualizing person. Self-actualization requires that a person determine his goals and take responsibility for becoming all that he is capable of becoming. The concept of self-actualization is closely associated with the function of the nongraded school; each learner becomes what he wants to become, not what someone else wants him to become and he is assisted in the process of self-fulfillment.

The second category in the model is *curriculum*. In a nongraded school, the curriculum is designed to emphasize the broad structural concepts and modes of inquiry in the disciplines. In other words, it is characterized by a concepts approach in which the fundamental concepts, principles, and skills of a discipline are used to help the learner generalize the significance of his experiences. The topic approach, in which isolated topics are presented and specific facts are treated without any relationship to major ideas, is totally inappropriate in a nongraded school. Facts are important only insofar as the learner can use them, analyze them, and synthesize them in order to discover key ideas and to see a much broader picture than facts in isolation can present. The ideas that are valuable in ordering and explaining human experience and that have great transfer value in new situations are used as guiding structures in the selection of books, films, filmstrips, lectures, questions, and so on. Concept development rather than mastery of factual information is evaluated and short-term progress is constantly related to broad concepts and skills, which take years to develop. This description of curriculum pattern does not specify objectives and content since both will no doubt vary from learner to learner.

The reader might question why the third category, *instruction,* is not identified as 'the role of the teacher.' The three statements that follow do not necessarily refer to a human teacher. Instruction is conventionally associated with the human teacher, but as science and technology advance, we could conceivably provide instruction without one. In the future, perhaps, we will see computers, programmed texts, and teaching machines providing learning opportunities. Consequently, to refer to instruction as the role of the teacher might make the model obsolete for the future. The three statements describing the nature of instruction in an ideal nongraded school are:
1) Learning activities are provided on the basis of individual needs, interests, and abilities.
2) Learning activities are paced at the individual's own rate of learning.

3) Learning activities are determined after considering data on all phases of growth.

To provide learning activities on the basis of individual needs, interests, and abilities, nongraded schools must be exempt from traditional curriculum guides and administrative policies that require particular units of study to be taught. If, for example, not all children in a class are interested in Mexico, then there must be freedom to respond to the different interests that do exist. But this does not mean that individuals always work alone; those with common needs or interests work together as a group. The essential point is that each learner is involved in an activity appropriate to his needs, interests, and abilities.

An important issue is whether the learner's needs should be determined by the school personnel or by the learner himself. Frequently the school personnel identify a need of the learner but the learner fails to recognize or accept the need, or the learner identifies a need that the school fails to recognize or accept. The question of whose perception should prevail will be clarified in the last category, role of the learner. Once a need has been determined, however, learning activities are engineered so as to be compatible with the need.

Pacing learning activities to provide for individual differences in rate of learning is the most emphasized characteristic of the nongraded school. But a common practice in many so-called nongraded schools is to pace individuals at a group rate. Instructional groups made up of children at similar achievement levels are established and the members of the group move daily at the same pace. Ideally, when a child is ready to move ahead he can change achievement groups and find more appropriate learning activities. But it is difficult for the child to join the next achievement group as his daily learning activities (and progress) are fixed and this next group has generally advanced beyond a feasible point of entry for him.

Dewson Street Junior School in Toronto – one of the city's most progressive nongraded schools

In a truly nongraded school, each learner is provided with learning opportunities that permit him to move at his own pace each day. For example, two children who are very similar in terms of achievement might be provided with the same learning opportunity for one day but, after that, one child might continue to utilize the initial opportunity for several days while the other moves ahead and is given different opportunities. When people reach the same point on a learning continuum, they do not necessarily continue to move ahead at a group rate for more than several days. The idea of ad hoc grouping, based on short-term commonalty of learning problems, would seem to be a practice consistent with individual pacing. Only when learning opportunities are paced to permit each individual to move ahead as erratically as his unique growth pattern dictates will we realize an important part of nongradedness.

In the ideal nongraded school, decisions regarding learning activities are made on the basis of data on intellectual, social, physical, and emotional growth. The common practice in many nongraded schools is to make these decisions after considering data on academic achievement, without consideration of other factors. Consideration of such factors as learning style, energy rate, and peer relationships should also become significant in offering learning opportunities. It might prove interesting and helpful to have a specialist in each of the major areas of human growth challenge the instructional decisions made in order to determine whether data concerning the area they represent are actually used in arriving at decisions.

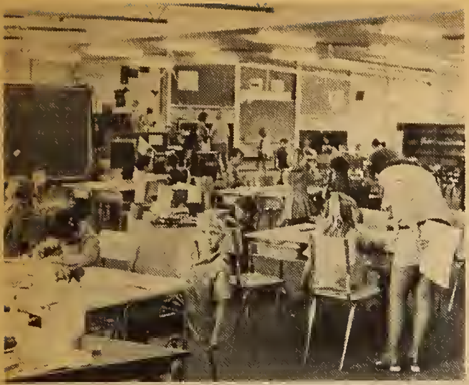
The fourth category, which also has three statements describing the nongraded school, is *evaluation.*
1) Evaluation of all phases of growth (intellectual, social, emotional, and physical) is made for each individual.
2) Evaluation of each learner's progress is an almost continuous process.
3) The adequacy of each child's progress is an individual matter, determined by appraising his achievements in relation to estimates of his potential.

The evaluative process requires the collecting of relevant data, which enables the evaluator to make appropriate instructional decisions. The nongraded school is concerned with instruments and techniques that provide data about all phases of growth. As well as using academic achievement tests to evaluate intellectual growth, it uses sociometric techniques, interest inventories, personality tests, and physiological examinations to measure social, emotional, and physical growth.

Evaluations in a truly nongraded school are not conducted once, twice, four, or even eight times a year. If appropriate instructional decisions are to be made, almost daily evaluation is necessary to supply the data for making these decisions. But this approach is hardly feasible without a great deal of self-evaluation by the learner, thus procedures and instruments that permit the learner to check his own progress are highly desirable.

In nongraded schools, judgments of a child's progress are based on estimates of his ability rather than on a group norm. The reason for judging progress is not to decide whether the learner has been good or bad but whether the learning opportunity (activity) has been good or bad for him. If the learner makes little progress in relation to his ability, we simply conclude that what he used as a learning aid (lecture, film, field trip, book, or whatever) was not the best thing to use and might have inherent weaknesses. The primary purpose of evaluation is to judge the instruction, not the learner.

Two statements describe the fifth category, *organization.*
1) Nongraded schools are organized to



Dr. H. N. MacCorkindale Elementary School in Vancouver – where a nongraded system is combined with open-plan architecture

facilitate continuous and cumulative progress for each learner during all his school years.

2) In nongraded schools alternate or multiple learning environments are available.

Nongraded schools are organized so that once a learner masters a task he immediately moves ahead, without unnatural pauses. The nongraded organizational scheme must also provide for cumulative learning; learning situations are arranged so as to enable learners to build upon what they have already mastered. Artificial barriers to progress, such as calendar dates, distinct primary and intermediate units of organization, and achievement level grouping are not used to regulate learning. Progress becomes a continuous affair from the day the learner enters school (whether at age six, eighteen, twenty-one, thirty, or sixty) until the day he leaves school. Besides an overall unified organizational pattern, daily operation is arranged for the continuous unbroken progress of every learner. Daily time schedules are varied for the learners; there is no one fixed schedule for all. For example, one child might be working on a project all morning while another child has scheduled four different activities for himself during the morning.

Because certain environments are more conducive to progress than others for any given individual, nongraded schools must be organized so that alternative learning environments are available. Once different environments have been established, the students have access to the environment most conducive to their progress.

Different environments can be created by manipulating at least three major factors in the teaching-learning situation: the type of peer group, the mode of instruction, and the content presented. Some learners will no doubt function best in a peer group that is at approximately the same age and achievement level. Other learners will make the best progress if they are placed in a group in which they are the oldest and are superior in achievement. Still others will experience a greater challenge and more growth if they are in a group in which there are older learners who are superior in achievement.

The mode of instruction used in any environment is another major factor in learning. Instruction can be provided by a human teacher (or a team of teachers), a machine, a peer group, or some combination of these modes. No doubt some learners will find it easier to learn using one mode rather than another, and nongraded schools must establish environments that permit learners a choice.

A wide range of content must also be provided if a school is to satisfy individual differences. The creation of learning environments that offer opportunities to explore and investigate a variety of interests at many different levels of sophistication is a basic requirement of a nongraded school.

By manipulating each of these three variables – peer group, mode of instruction, and content – a large number of alternate environments can be created. However, many nongraded schools provide only one placement for a child – for example, a team-taught, multi-age classroom. If children are different, do they all need a team-taught, multi-age classroom? Might some not need a self-contained, single-age classroom?

The sixth and final category of the model deals with the *role of the learner.* This category, along with that of 'school function' contains the most important propositions.

In a nongraded school, the learner uses his own needs and interests to establish the objectives he will pursue. The author's conclusion, from the values and data used, is that the learner will, in the final analysis, make the choices about his program. The teacher can and should participate in the decision making, but the final decision should rest with the learner. This role implies an awareness on the part of the learner of his interests and needs and a responsibility for using them in planning his program. In other words, the role requires the learner to be self-motivating and self-starting and then self-directive. These abilities are the concern of instruction rather than subject matter mastery. How do you teach self-motivation? Goal formulation? Self-direction? These questions are more germane to a nongraded school than the question of prescribing for each learner. To be perfectly clear, the popular role of the teacher as the decision maker for the learner is *not* accepted as an appropriate view of the nongraded school.

Thornlea High School in York County – where students have freedom of choice from a wide range of courses

At present, it is doubtful whether any schools completely fit the preceding description of a nongraded school. The description represents an ideal model, one that should provide direction. Hopefully, the model will give us a clearer picture of our goal and permit us to communicate more accurately about nongraded schools. With the assistance of this model, we no longer need to speak of absolutes, of whether a school is or is not nongraded. Instead, we can refer to degrees of nongradedness. Each proposition in the model serves as a standard, and schools striving to implement the model can be assessed in relation to each statement. In so doing, schools would have a profile of nongradedness – ranging from little or no compliance with one proposition to complete compliance with another.

The model of nongradedness has recently been published under the title *Exploring the Nongraded School.*[1] In the publication the rationale behind each proposition is presented. If, after studying the process of formulating the model and the model itself, you find the conclusions difficult to accept, how would *you* describe the nongraded school in terms of each of the six categories dealt with in this article? This type of dialogue could be extremely valuable in terms of moving the nongraded school from what is to what should be.

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[1] Daniel M. Purdom, *Exploring the Nongraded School* (Dayton, Ohio: Institute for Development of Educational Activities, 1970).

# Piaget's Theory of Child Development

Robbie Case,
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According to a recent poll taken among members of the American Psychological Association, the three men who have made the greatest contributions to psychology have been Freud, Skinner, and Piaget. Of these three, Piaget is the least well known and the least understood. Freud has given the world psychoanalysis and 'the unconscious.' Skinner has given the world behavior modification and 'reinforcement.' But what has Piaget contributed? For that matter, what has he studied?

**Philosophic Foundations**
Let me first outline the philosophy that guided the work of many American psychologists in the first half of this century, and contrast it with the philosophy that directly stimulated Piaget's investigations.

The work of many American psychologists, in the philosophic assumptions it makes, draws heavily upon the British empiricist philosophers, Locke and Hume, who wrote in the early 1700s. Both Locke and Hume were concerned with formulating ideas about the way in which man comes to acquire knowledge of the world. They both came to a conclusion that, although somewhat heretical at the time, seems almost commonplace now: man acquires his knowledge of the world not from God or from logic but from the impressions of the world which he receives through his various sense organs. At birth, man is essentially a 'blank slate,' but as sensations are etched into this slate he acquires knowledge of the world. The process by which this knowledge is acquired is essentially that of association–the association of one set of sensations or stimuli with another.

It is perhaps not too difficult to see how this view of man's acquisition of knowledge could in a sense predetermine the questions that would interest psychologists who grew up in a world that accepted it. They focused their attention on sensation, on the laws governing the association of sensations, and on the conditions that would produce appropriate learning in the face of certain sensations.

By contrast, the work of Piaget was based not on Locke and Hume but on the writings of the German philosopher, Immanuel Kant. I say 'by contrast' since Kant, who was also an epistemologist (that is, a philosopher interested in how we gain our knowledge of the world), disagreed with some of the main conclusions of Locke and Hume. Although he had read their works and was impressed by their genius, he had the advantage of coming along later and was able to point out inadequacies in their conceptualization of the knowing process.

One of the main dimensions of human knowledge focused on by Kant was its organization. He contended that, while it is true that we cannot acquire any knowledge of the world *without* sense organs, they being our only direct link with it, it is impossible to explain the organizational properties of our knowledge by assuming that our sense organs are the *only* source of our knowledge. In short, he contended that we could not explain human knowledge by assuming that it had been written on a blank slate. According to Kant, human beings had to have some additional, a priori knowledge, which enabled them to structure their sensations. To use a modern metaphor—the human machine could not be just a sensation receiver and associator; it had to be preprogrammed to structure sensations in a certain way.

It is worthwhile to consider some of the concrete examples Kant gave to illustrate this point since they are almost all examples that Piaget investigated experimentally.

Let us look at our surroundings: what we see is a unified scene. It is not exactly the sort of scene we would see in a movie–it has more depth and a little less color–yet it does have a certain movie quality about it in that it forms a unified whole. But consider what sort of sensations are coming into our visual systems. If we examined our eye movements, we would see that what they are doing is glancing all over the place, taking five snapshots per second. Kant's point is that it is insufficient simply to say that sensations are associated by a blank stare.

Because we are human, each one of us perceives not a chaotic flow of images but a scene that has definite spatial organization. For Kant, humans are preprogrammed, as it were, to organize this way. They have some a priori knowledge of space.

It is possible that with some drug or with some brain injury, we could enter a state in which we would perceive an unconnected flow of images. But this suggests all the more strongly that the way we organize the world is not the *only* way it can be organized; it is the way we organize it as normal humans.

The notion of space appears to be a very basic one indeed. Consider this second example. If we take a handkerchief, and place it on top of a matchbox, we would not suggest that the matchbox had ceased to exist. The very idea is absurd. As Kant points out, however, there is absolutely no way we can know that it hasn't ceased to exist—strictly on the basis of sensation. What we can note on the basis of sensation is that, if we cover the box but do not take our eyes from it and then put our hands under the handkerchief, we can pull the box out again. Based on the short separation in time and due to the fact that this happens on hundreds of occasions in our life, we can say that we will assume that things don't cease to exist. However, as Kant pointed out, we certainly don't feel that we are making an 'assumption'—we feel that what we are saying is true, absolutely and necessarily. This object has a permanent existence independent of our own. Where do we get this feeling of necessity? For Kant, it is rooted in our a priori knowledge about space and about time.

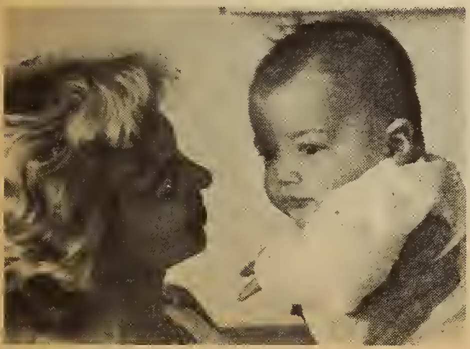
Let us look at one final example. If you take a pencil and push a matchbox with it, it seems perfectly obvious that the force exerted on the matchbox is what has caused it to move. Here is another 'perfectly obvious' statement that Kant says human beings could never possibly make if their entire knowledge of the world was simply 'written in' to them by sensation. As human beings, we feel that we are not interpreting sensations when we say the force on the pencil caused the box to move. We are simply stating what is true. Yet imagine a man who was under the influence of some drug affecting his sense of time and reality. It is not too difficult to imagine him watching the pencil approach the box, and then noticing with complete wonder that the box starts to move as well. As even Hume pointed out, we never *see* one thing cause another thing to happen—what we see is that two sorts of events constantly accompany each other, with one slightly preceding the other in time. There is no basis in sensation for our assumption that one event *causes* the other. All we can really say is that if two events have always taken place in this way, they will probably do so again. Yet we do not say that the matchbox will *probably* start to move; we say that, as long as the physical conditions are the same, it will *certainly* start to move. Once again, we do not just passively 'receive' impressions from the world; we actively structure them in a way that imposes organization and simplicity. It is simpler to suppose that certain events cause others than to suppose that each event is unrelated to others, except by probability. It makes the universe more ordered.

When Piaget began his pioneering studies in cognitive development, it was with this Kantian perspective. He realized that human beings do not just passively 'receive' the world; rather, they actively structure it. He realized, too, that the organization they impose is dependent on universal notions: that objects have a permanence in space, that space and time are intimately related, that later events can be said to be 'caused' by earlier events, and so on.

The questions that began to interest him may well have been the result of his work at that time. He was a student of the man who designed the original IQ test, Alfred Binet, and his work required him to record the responses of children to Binet's items. Some of the questions that Piaget became interested in were ones such as these: Is the 'assumption' that objects have permanence in space something that humans make the moment they are capable of seeing the world, or is it something they have to re-assume or re-invent, as it were, each for himself? Is the organization that adults impose on the world the same as that which children impose on it? Is the way in which adults view time, space, causality, and so on the same as the way children view it? Piaget himself describes his interest as 'genetic epistemology'—the origins, or genesis, of man's basic knowledge of the world. The ponderous titles of some of his books reflect this interest: *The Child's Conception of Causality* (1927), *The Development of the Notion of Time by the Child* (1946), *The Representation of Space by the Child* (1954), and *Studies in Genetic Epistemology* (1959).

**Experimental Findings**

*The Sensorimotor Stage*
From the first few days of life, the infant exhibits basic reflexes when confronted by certain stimuli. If a nipple is placed in his mouth, he will suck; if something enters his hand, he will grasp; if a shape moves into his field of vision, he will track it. But his appreciation of causality, or of the permanence of objects, does not appear to be as inborn as these basic reflexes. In fact, it does not appear to be really *finely* developed until he is about two years of age.

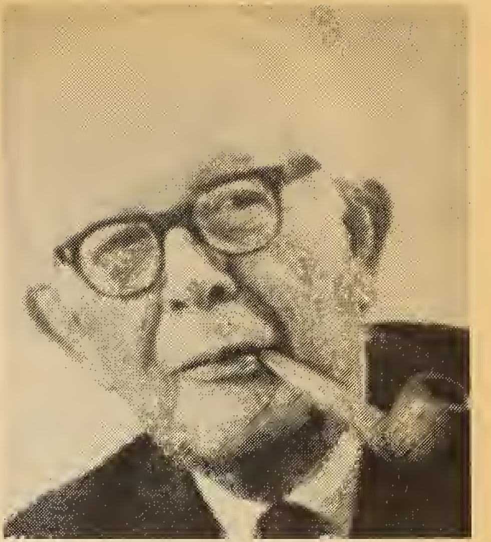


Consider the following experimental facts. If an interesting object enters his field of vision, even the youngest infant will track it. However, if it goes out of his field of vision and then returns, he will not have waited for it and his glance will have moved to other things. Time does not appear to be represented the same way as for an adult; when something is out of sight, it is out of mind. When he is somewhat older, say about six months, the infant can coordinate his original basic reflexes; for example, he can look at something, reach out for it, grasp it, and bring it to his mouth. The concealment of an object, however, still seems to remove its existence from his consciousness. Hold a rattle out to him and as he starts to reach out, conceal it behind something he could easily move, such as a handkerchief, even one so thin that it reveals the contours of the rattle. All his signs of intention will vanish and he will not try to retrieve it. As a matter of fact, there is a stage when he will not try to retrieve something he enjoys even if it is only *partially* hidden by a handkerchief.

When we think about it carefully, we can appreciate that a half-hidden object does not look exactly the same as one that is completely in view. How is the child to know it is not 'half-made,' as it were? When we think about it carefully, we can appreciate that a covered object is not present to sensation at all. How is the child to know it has not been completely *unmade*? Piaget's interpretation is that this is exactly how infants do see the world – things are made and unmade, and a half-hidden object is only half an object.

Consider another example. There is a stage in the first year of life when a baby will make no attempt to rotate a baby bottle that is presented to him bottom first instead of nipple first. Once again, how is he supposed to know that they are the same object? The bottom certainly doesn't look like the top. The knowledge that an object looks different at different times but is actually a constant thing seems to be one that the infant has to *develop*. In short, the world as we see it is not something that is automatically *given* to the infant at all; it is something that he has to construct.

In constructing his world, the small child seems to follow a definite series of steps, or successive approximations, to the world we know. When he is just beginning to toddle, one can hide his favorite toy under a bright red handkerchief (in his full view) and he will remove the handkerchief with great glee. Aha, you say, he has learned that an inanimate object continues to stay where it was put. But has he? After you have played this game a few times, place the favorite toy, again in full sight, under a yellow handkerchief. Then watch as he looks under the red one again and appears baffled that the toy is not there. What he appears to have learned is only a first approximation – that when someone causes something to disappear, it will always continue to exist under a red handkerchief.


Jean Piaget

A few months later, this sort of trick will not fool the child; he has advanced a step in his understanding. But this time, take a favorite toy and leave it partially visible in your hand. Then pass it under the yellow handkerchief, out the other side (still partially in view), and bring it finally to rest under the red handkerchief. Where does the child go? To the first handkerchief, of course, and there he stops. Baffled. Where *is* that toy I wanted?

It is not until about the age of eighteen months to two years that the child ceases to be fooled by any of these tricks. According to Piaget, then, it is not until this time that he has a really strong intuitive notion of the fact that objects have a permanence independent of his perception and that cause and effect can operate independent of his willing them.

How has he acquired this knowledge? If you watch a child under the age of two years, you will note that he is continually exploring things with his mouth, his hands, his eyes, and so on. At first these explorations occur independently of each other, later they are coordinated, and finally they are extended to include shaking, throwing, and other actions. Such exploration and testing may not be too easy on parents, but the indications are that it is practically universal.

For Piaget, this activity is the key mechanism by which an organized view of the world is constructed. An action, even if it is a reflex, is represented in the brain by some sort of plan. You could call it a program. You could call it a neural impulse: the firing of some cells in the brain. It doesn't matter. Piaget calls it a *scheme*. Consider what happens when the child looks at his bottle or a matchbox. The visual configuration of the top activates something in the brain, called a *schema* by Piaget, and the child then acts on the object himself by manipulating it. Presto! A brand new visual configuration appears and, furthermore, when he manipulates it again the first configuration reappears.

In Piaget's terminology, the first schema, or the representation in the brain of the top of the box, was assimilated by (or actually incorporated into) the scheme representing the child's action. Then the reciprocal event occurred; the second schema or visual pattern was assimilated by the same action scheme. As this occurs time and again, a compound schema is built up, composed of all the various ways the matchbox can look (all the various schemata) and bound together, as it were, by all the ways it can be acted upon (the schemes). Thus, the top of the box is no longer a floating isolated pattern. It becomes part of a series of patterns, which are intimately connected by virtue of the fact that any one can be produced from any other by simply acting on it. It becomes part of a coordinated whole.

To go back to the terminology of Locke and Hume, and of early American psychology, the sensory sensations finally *do* get associated. However, they do so only by virtue of the connections provided by the internal and external activities of the child. Because Piaget sees the product of the child's first two years of life as the result of this sensorimotor integration, he labels this first stage of the child's development the sensorimotor period.

### *Preconceptual and Intuitive Thought*

The toddler now uses the achievements of the first stage as building blocks to reduce the chaos of the world even further. Now that objects are perceived as entities, and reflexes are integrated into coordinated movements, they can be named. A little later they can be grouped together in different ways and the whole group can be named.

However, once again, none of these accomplishments occurs overnight. To begin with, the child's language reflects that his psychological units are still objects very different from adult units, which tend to be concepts. At first he will be very uncertain as to the difference between a particular object, his brother, and the whole class of objects, boys. He will not always be sure if objects are actually in the same group. When he does build rules about general categories, they will, as with the rules built in the sensorimotor stage, be only first approximations to the ones used by adults. They will tend to focus on only one attribute of a class and then not necessarily on the adult one. We are all familiar with the child who delights his parents by labeling a dog as 'doggie,' and who goes on to label a cow as doggie, a cat as doggie, and maybe even his younger brother as a doggie too. By degrees, however, the child's organization and classification of the world becomes more refined. By the age of five or six, although he cannot yet answer such tricky questions as whether there are more red roses or more roses in this bowl, he does appreciate that all the flowers are roses, and that some are red and some are white.

According to Piaget, the mechanism at work is very similar to that in the first stage. By forming things into classes and dividing them again, by calling a certain pattern a cow at one time and an animal at another, the child's mental activity begins to tie together the separate labels and the separate groups into an organized hierarchical framework. At first, during the preconceptual stage, a moving object is gradually tied together with other similar moving things until they all may be called cows. Then, in the intuitive stage, cows are tied together with cats and put into the category of animals, and the whole classification system is bound together as a whole. A Chevrolet made by G.M. becomes one of a group of cars made by G.M. It is realized that there are cars made by other companies, and so on. In short, although he may have trouble keeping all three elements of a classification scheme in mind at once, the child does begin to classify elementary concepts into higher order concepts and to see individual objects in terms of this hierachy.

In the years between two and seven, then, the child builds on objects to form concepts and on concepts to form classes of concepts. He does this by grouping things together, regrouping them, naming them, and continuing to explore. By the age of seven or eight, he is capable of making some remarkably sophisticated observations about the world. His thinking begins to take on quite a logical character. However, it still depends heavily on interacting with the concrete world and is different in interesting respects from adult thought.

### *Concrete Operations*

The building blocks are now not just individual objects or people but classes of objects or people. Not only does a lump of Plasticine remain in existence when hidden but it remains Plasticine, able to be differentiated from other similar objects such as mud by certain properties, and itself containing subcategories depending, say, on whether or not it will harden overnight.

Once more, by acting on the world, the child begins to reduce the remaining chaos. He begins to extract higher order features of groups that do not change, even though the groups change drastically. For example, having learned by the age of five or six to classify objects as long or short, heavy or light, and so on, and to relate perceptual properties of objects by using categories like more and less, he begins to appreciate that there are such higher order categories as length and amount, which remain constant even though the perceptual input (on which classification is originally made) may change drastically.

Probably the most famous of Piaget's experiments concerns just this sort of achievement. Take your bright-eyed little five-year-old daughter who has just learned to count. Have her count out five beads in one row, then five in another row right beside it, and ask her if there are the same number in each row. She will tell you – perhaps proudly – that there are. However, spread out one row a little farther so it looks longer and ask her if there are still the same number in each row. Again, perhaps proudly, she will tell you that there are not, that there are more beads in the long row of five than in the short row of five. What we see once more is that her first rule is only an approximation to the adult one and that it is based more on changing sensations.

By nine years of age she will no longer make this mistake. However, her understanding will not yet be complete; once again it will proceed in definite steps. If we take two balls of Plasticine that she agrees are equal in size, and roll one into a sausage, she will not think that the long one has more Plasticine than the short one, but she will still think that the long one weighs more.

Although the kind of activity taking place is no longer one of sensorimotor manipulation, or of grouping and naming, Piaget sees the mechanism by which these higher adult constancies are introduced as essentially the same as the mechanism operating in the first two stages. The child learns that one can always transfer two arrays of five (e.g., five pounds of butter and five pounds of feathers) into a state where they are in one-to-one correspondence, so the various possible perceptual configurations of 'five' all get tied together into an organized whole, connected by the internalized operations, the mental schemes. The result is that one label can eventually be applied to any array of the same number, no matter how different they look. Five pounds of butter will weigh the same as five pounds of feathers, regardless of appearance.

*Formal Operations*

With such higher order concepts of the properties of objects as number, quantity, and weight, with a good intuitive grasp of causality, and with an understanding of the various possible ways things can be transformed, the child is ready to begin creating an order that is more formal. He is ready to begin relating things – for example, such concepts as mass and force – in terms of invariants which are of a higher order still. When we see how much one thing is built on another and how much is involved in the process of forming these concepts, it seems a wonder that the child ever gets to this final stage but he does so at about the age he enters his teens.

His activity in noting the things that actually happen in the world and in producing changes appears to enable him to begin thinking about what *might* happen and to envision all the changes that are possible. It enables him to reason without visual props. This in turn enables him to deduce an appropriate method for scientific procedure.

Consider the following problem. A spinning wheel has holes of various sizes in it and marbles of various sizes on it. A child is asked to figure out why some marbles fall off before others and then to test to see if he is correct.

The child who is in the concrete stage can classify the holes quite accurately and can even cross-classify them. He can see that there are big and small holes and that in both categories there are some near the center and some near the edge. He also has an intuitive notion of causality. However, he appears restricted to noting what actually occurs. If you ask why the big one fell off first, he will say, 'Because it's bigger.' However, if you arrange them so that a small one falls off first, he will sometimes say, 'It fell off first because it's smaller,' without being overly upset by the contradiction. If you ask him to *prove* that big ones fall off first, he will not always bother to keep other things constant.

For Piaget, this child has not internalized a system in which *any* relevant attribute may vary and in which many different combinations of possibilities can all produce the same result. The child sees a big marble in a small hole near the edge and concludes that it fell off so soon because it was big. He does not imagine that one could put a small marble in a small hole near the edge and that it might fall off too; so he does not see the need to control other factors before he draws a conclusion about size. In short, although he has an internalized classification system, it is still bound to the concrete and is not yet complex enough to represent all possible conditions of the world accurately.

In describing the sequence of stages, I have been referring with confidence to 'the child' rather than to *some* children. This is because a remarkable uniformity has been found in the things children can and cannot do (the knowledge they have and don't have) and in the order in which they learn to do them. The exact age at which an individual child may begin to appreciate that weight does not change if nothing is added or subtracted may vary, but it never occurs before he learns that objects have a permanence or after he learns that force divided by mass equals acceleration. Within substages the same is true; a child will always learn the conditions under which weight remains constant before he learns the conditions under

which displaced volume remains constant and after he learns the conditions under which number and amount remain constant. We may thus talk about 'the child' since in these most basic interactions with the world and in the constructions of reality, all children achieve an identical series of accomplishments in an identical order.

What I have described, then, is a series of stages and an active process through which all children develop. At each stage the child starts with a world that is ordered in some respects and chaotic in others. And at each level, by acting on the world, by executing transformations, by reversing these transformations, and so on, he builds some further element of order into it. He constructs something that remains unchanged in the face of change – a coordinated whole.

Although this may paint a somewhat hazy moving picture of a child's intellectual development, with the film being speeded up more and more rapidly as the child gets older, I think it is enough to serve as an introduction. The two main 'findings' of Piaget most frequently drawn upon by educators have been illustrated. All children pass through an orderly sequence of main stages and substages in developing an adult conception of the world. And the process by which they achieve this is a very active 'constructive' one: first, action in its most primitive sensorimotor sense, later, action with a concrete base, and finally, action that is internalized, symbolic, and hypothetical, bind together the 'starting blocks' of each stage into a larger, more organized whole.

**Note:** A follow-up article by the author on the implications of Piagetian theory for educational practice will be published in a subsequent issue.

# Life after School

An interview follow-up of graduates and dropouts from occupations classes, with focus on non-vocational areas of functioning.

In the past, studies of the post-school performance of students from occupations schools have tended to focus on vocational considerations only. But the way in which these young people cope with life is also significant and has long needed examination. For this reason, and with a view to gathering information that would provide guidance in future curriculum planning, we undertook a follow-up survey of a group of students who had attended occupations schools.

Our task was made more meaningful by the implications it held for a program introduced a few years earlier to London opportunity classes, one source of students for the occupations schools. Developed by Ronald Posno of the London Board of Education and called 'Living Studies,' this program sought to achieve certain behavioral objectives in post-school life. Simply stated, its purpose was to enable students to cope with the problems of day-to-day living in the adult world.

In this study we have sought to determine the extent to which occupations students measure up to the post-school behaviors upon which the Living Studies project is based. A second aim was to provide data to determine which instruments could be designed for future evaluations of the project, and our final aim was to indicate areas for future, more intensive study.

### The Survey

The behaviors we chose to examine in the survey were essentially those that the Living Studies Program sought to influence and, for this reason, our areas of investigation were closely related to the objectives of the program. However, we moved a little away from the classifications used in the program (e.g., personal, social, economic, vocational, and domestic competencies) and centered our inquiry on the respondents' attitudes toward their work, their work experience, their handling of money, and their personal affairs and habits. In addition, we assessed the quality of the answers given and the questions asked by the respondents. We had two groups of respondents, one made up of graduates and the other of dropouts, and for purposes of comparison the findings for the two groups were recorded separately, by percentages, under the various headings. Because of limitations of space, however, these tables are omitted from this article. The survey groups were selected at random from the 1968 enrollments of Sir George Ross and Thames Schools, with equal representation from both. At the very outset, we discovered one major difference between the two groups; the twenty graduates were easily reached through addresses on file in the school but the dropouts were difficult, and in some cases impossible, to trace, and we were able to reach only sixteen of them. A general synopsis of those in each group follows.

*Synopsis of the Graduates Surveyed*

- Most had attended kindergarten.
- They had attended three to four different elementary schools, most of their schooling having been in London.
- Most had repeated one or two years of elementary school.
- The majority had spent at least one year in some special class prior to attending Ross or Thames.
- Attendance and lates had been a problem with many.
- The reported IQ of the group was 86, which was higher than the dropouts as a group.
- As a group they had slightly higher grade 8 marks than the dropouts.
- As a group they had consistently scored higher in all areas in grades 9 and 10 than the dropouts.
- Some 80% were permanently employed.
- All were either living at home or were married.
- Their marriages appeared to be successful.
- Some 80% had come from intact homes.

*Synopsis of the Dropouts Surveyed*

- Most had attended kindergarten, with some indication at the primary level that they were not progressing as well as expected.
- They had attended three to eleven different elementary schools, most of their schooling having been in London.
- Most had repeated two years, grades 1, 2, and 5 being the most common.
- Nearly all had spent at least one year in special education of some sort prior to attending Thames or Ross.
- Many had had serious attendance problems all their school lives, some having been absent for as much as 30% of their schooling.
- The reported IQ of the group ranged from 68 to 103, with the mean in the mid-80s.
- Most had not had a particularly successful first year in the occupation program and left school either then or early in their second year.
- Some had had little or no full-time employment and others had had several jobs, with varying degrees of success.
- Many were not working at the time of the survey.
- About half were not living with their parents full time.
- Two of the girls had children and were on welfare; their marriages did not appear to be very successful.

### The Interview

An interview appointment was made with each respondent during the original telephone contact, and in all cases the interviewer visited the respondent in his own home. A number of considerations influenced our choice of setting; the respondents suffered a minimum of inconvenience and were afforded a sense of security through familiar surroundings, and the interviewer was able to observe something of their way of life and their behavior with family and guests.

### Attitudes toward Work

The attitudes of the two groups to work were almost identical – nearly all of the respondents enjoyed earning money, approximately 80% were satisfied with their current jobs, and more than 90% felt they could handle better jobs.

### Work Experience

In actual work experience, the

J. S. Small, T. R. Wilson, and
R. G. Stennett,
London Board of Education

graduates had tended to fare better than the dropouts, having had fewer job changes, fewer periods of unemployment, and higher weekly earnings (an average of $78.95 for the graduates and $57.55 for the dropouts). In both groups, however, 50% of the respondents had left at least one job because the work was distasteful and had suffered periods of unemployment because of failure to find a new job before leaving the old one. The dropout group scored higher on being 'fired' and 'laid off,' with 50% having undergone this experience as compared with 37% of the graduates. 'Business close down' affected only the graduates, accounting for a loss of employment for 12.5% of the group. Unemployment insurance was claimed by 20% of the graduates but only 13.3% of the dropouts. Welfare, however, was claimed by 20% of the dropouts and only 10% of the graduates. Union membership was confined to the graduates, involving some 20%.

**Financial Affairs**
The two groups were sharply divided in their banking habits, with 90% of the graduates using banks regularly as opposed to 53% of the dropouts. The dropouts tended to have savings accounts while the graduates favored savings-checking or checking accounts. Fifteen of the twenty graduates reported savings that averaged $546 and six of the sixteen dropouts reported savings that averaged $371.

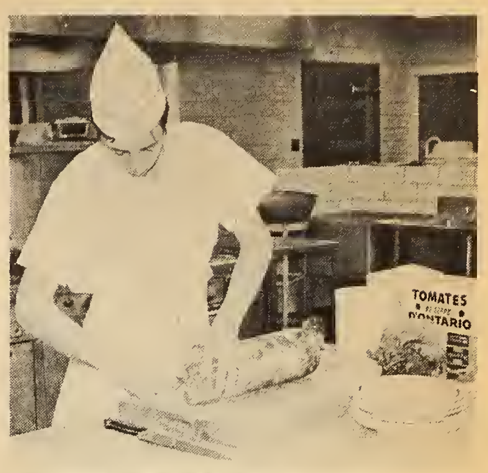
Thirty percent of the graduates and 7% of the dropouts had charge accounts. None of the respondents in either group held credit cards and all viewed their use as potentially disastrous.

Some 35% of the graduates had accepted financial obligations beyond ordinary living expenses and 75% of these had made all payments regularly. Only 15% of the dropouts had assumed such responsibilities but none had discharged them adequately.

**Personal Affairs and Habits**
In a variety of personal matters, the graduates showed greater maturity and self-reliance than the dropouts. The graduates regarded bank loans as the proper means of meeting financial difficulty, while the dropouts looked to family or friends for help. All of the graduates had family physicians, while 20% of the dropouts depended on the emergency facilities of the local hospital or on help from relatives in cases of illness or accident. Almost twice as many graduates as dropouts held health insurance cards. All of the graduates appeared to take at least normal care of personal property while this could be said of only 86% of the dropouts. In matters of hygiene and grooming, the graduates scored 100% and the dropouts scored only 73%.

About half as many graduates as dropouts had experienced trouble at home or with the law. The graduates were much more concerned about exercising their franchise at election time than the dropouts. Seventy-five percent of the graduates claimed to be successful, while only 53% of the dropouts made similar claims. All of the respondents stated that they were happy, but both groups expressed certain dissatisfactions; loneliness was a common concern of the dropouts and the graduates tended to wish they had more friends. Some 30% of the graduates belonged to social organizations but only 7% of the dropouts held such memberships. All of the graduates behaved in a socially acceptable manner toward the interviewer and members of their families but unsatisfactory behavior was shown by 10% of the dropouts.

There were, of course, areas in which the findings were similar for both groups. All of the respondents regarded family, minister or priest, and friends as sources of help in personal and emotional crises. By and large, they all shared family and household responsibilities. Involvement in hobbies was reported by both groups but both avoided the new social situations that the use of community recreational facilities would create.



In the interviewer's assessment of answers given and questions asked by the respondents, ratings were given in terms of lucidity and relevance. All the graduates were found to be lucid and relevant in their interviews. The dropouts, however, received the following scores: 86.7% were lucid in their answers, 80% gave relevant answers, and 53% were both lucid and relevant in the questions they asked.

The survey findings indicate that occupations school graduates are better equipped to cope with life after school than are dropouts. This situation is particularly encouraging in view of the areas investigated, since the occupations school–in common with the Living Studies Program–seeks to build in its students an aptitude for life as well as for work. The background information obtained in this survey will now be put to use in developing measurement devices through which to evaluate the broad outcomes of the occupations program.

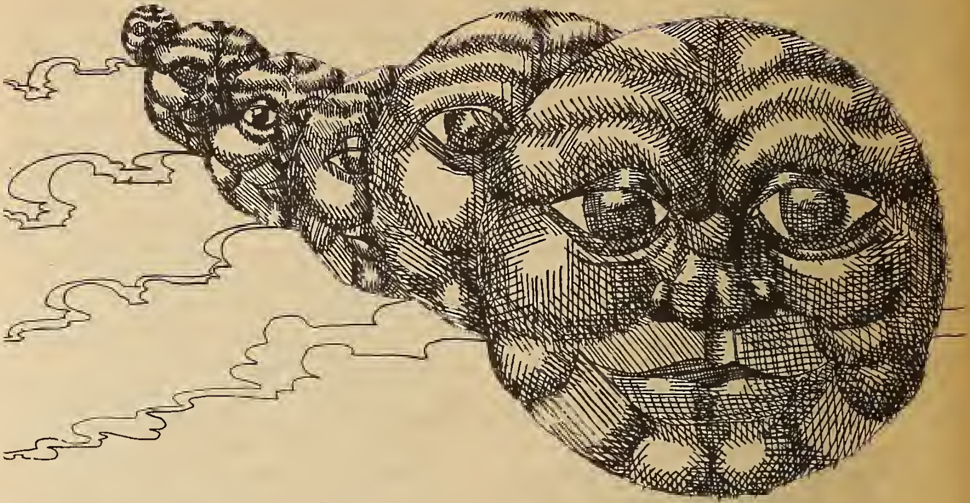
# Art at Canterbury High School

At the present time, when teaching jobs are hard to come by, it is interesting to note that the demand for art teachers is on the increase. Secondary schools in particular seem to be placing more emphasis on artistic instruction in the belief that it can be an integral part of the student's education and that it is essential for a full appreciation of our cultural heritage. One exciting and diversified art program that has attracted many students is being offered at Canterbury, a composite high school in Ottawa.

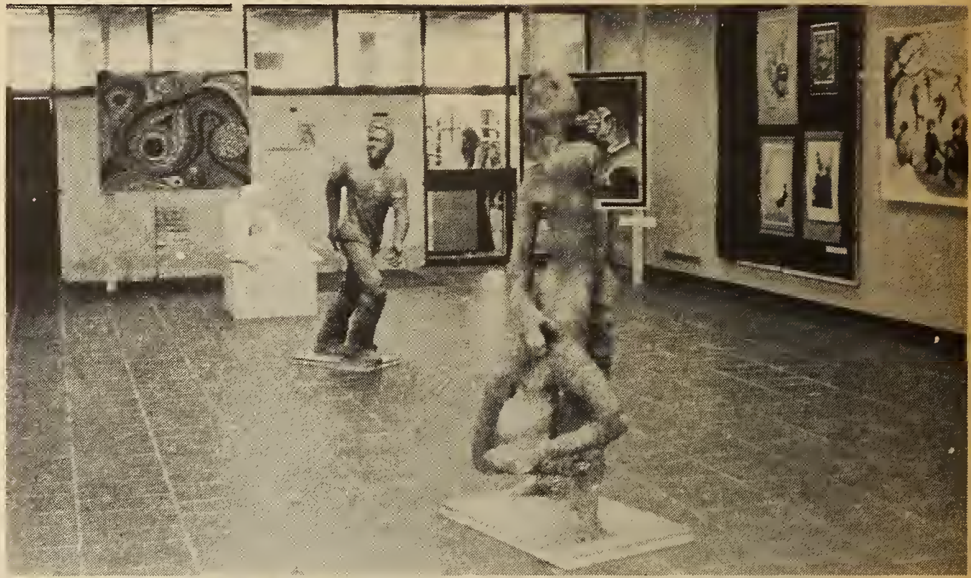
When Canterbury opened in 1969, it was intended to be an experimental school along the lines of Thornlea and other innovative high schools. So far, however, the amount of experimentation has been limited because of other intrusive problems. For example, the building has been shared with a French school on a shift basis, the English school functioning in the morning (7:30 to 12:40) and the French school in the afternoon (1:00 to 6:15). This year the French school has moved into a new building and so there will be more opportunity to try out new ideas. But from the outset, the local school board established a mandate for a special art program at Canterbury, and this program has become one of the school's most flourishing activities.

In charge of the art department at Canterbury is John Topelko, who came there from the High School of Commerce in Ottawa when the school opened, and it is largely due to his initiative and enthusiasm that the department has made such progress. Mr. Topelko teaches sculpture and drawing. The four members of his staff combine a variety of talents. Catherine Kennedy teaches design and such techniques as silk-screen and batik; Betty Williamson teaches graphics and plans to introduce a course in photography shortly; Carolle Knight teaches drawing, painting, and art history; and Ruth Dubuc, who is on a half-time appointment, teaches ceramics. What is unusual in this school setting is that all of these teachers are practicing professional artists who have exhibited extensively and have won awards for their work. Consequently, they are au courant with present-day artistic trends. They are also able to get the best out of their students and to recognize and develop talent where they find it.

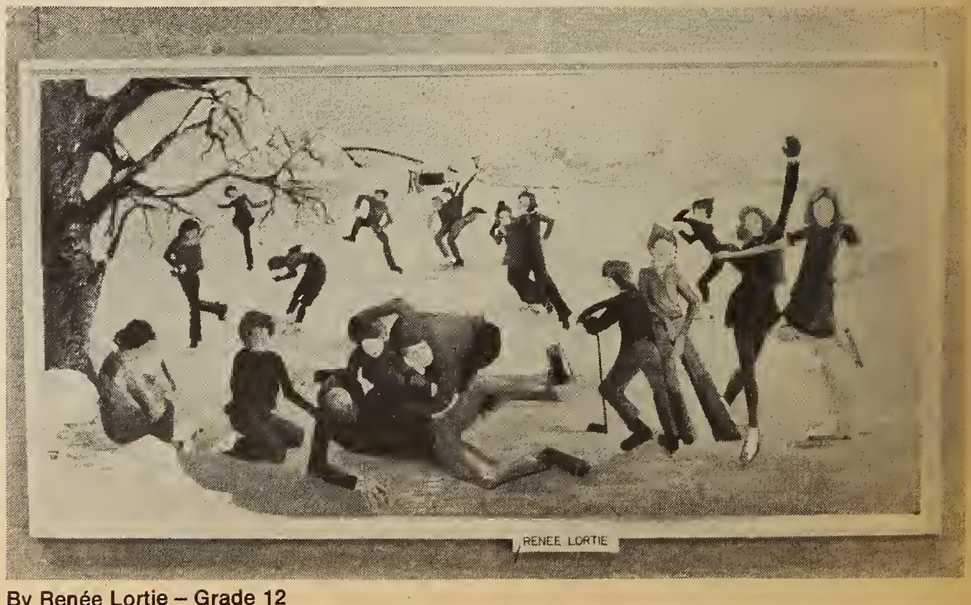
Of the eleven hundred English students at Canterbury, over two hundred take art. Of these, about half are enrolled at



By Catherine Bonnezen – Grade 11



Some works from the student exhibition



By Renée Lortie – Grade 12

Hugh Oliver,
OISE

the grade 9 level, which speaks well for Mr. Topelko's public relations activities: during the school year he visits grade 8 classes at local elementary schools, where he gives slide presentations and introduces students to the activities they might expect to enjoy in the art program. Students who take the program may opt for a single period (45 minutes) or for a double period each day. In grade 9, the students are taught by all the art teachers and are thereby exposed to a variety of activities. They are also taught how to research art books in the library. In the higher grades, most students explore those activities that are of special interest to them. Because of the varied skills of the teachers, the choice is unusually large – etching, weaving, jewelry making, pottery, and oil painting, to list only a few. Students often work on projects in groups, and there are many visits to art galleries and museums.

Up until last year, there were half-day courses in commercial art for vocational students. These courses have since been discontinued because similar ones are being offered by a nearby vocational school.

Naturally, some students take art because they regard it as a soft option, but a surprising number of them become enthusiastic when they realize the many exciting possibilities open to them. At the end of the school day, many students can be seen working on their creations in their own time. The effect of this stimulating atmosphere has led to high standards of artistic achievement among the students and to their extremely imaginative use of artistic materials. Here is an obvious case in which one picture is worth more than a thousand words – see the photographs accompanying this article.

Last April, as a culmination to the year's activities, an exhibition was held at the school, and most of the student work was sold. Prices ran up to $75, and architects and industrial firms as well as parents were among the buyers.

Perhaps the most significant outcome of the program has been to demonstrate that art has a useful place in an academic curriculum and that students do not have to have artistic ambitions to benefit from the study of art. In John Topelko's words, 'The uninitiated who regard art merely as a frivolous experience soon discover that self-awareness, discipline, and effort are related to problem solving, decision making, and craftsmanship.'

# Policy Analysis in Education:

## Looking at the Alternatives

T. Barr Greenfield,
Department of Educational
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My purpose is to demonstrate that the resources we spend on education depend upon the objectives we hold for education and upon the programs we adopt to achieve these objectives. In other words, I am saying that we spend money in education because we have aims we strive to achieve and because we believe that the schools and educational programs we build will lead to the achievement of these aims. This statement may appear so obvious that it requires no further elaboration. In my view, however, any thoroughgoing attempt to relate educational objectives, programs, and expenditures is necessarily a highly complex undertaking and one that has yet to be fully and meaningfully realized in school systems.

The problem as I see it is essentially one of conflict between our aspirations for education and our ability or willingness to pay for the programs that turn these aspirations into realities. I find this conflict most commonly demonstrated in the behavior and thinking of school trustees and administrators. Such behavior comes as no surprise to close observers of education since trustees and administrators are charged with the dual responsibility of translating society's general aspirations into tangible programs and ensuring at the same time that monies are available to pay for them. The blunt fact of the matter is that trustees and those who share their responsibilities have taken on what appears to be a virtually impossible task — to meet constantly rising public demands for education while keeping the costs of education within tolerable bounds.

We should expect, then, to see examples of inconsistent and even contradictory behavior among policy makers in school systems as they attempt to deal with this dilemma. For example, one may see in school systems the approach of those we call the 'education firsters.' These are the people who believe—and often passionately so—that meeting educational needs is a necessary if not sacred duty. The education firsters often become uncomfortable or even hostile if anyone asks them to specify their educational objectives. Under pressure to define their educational aims, they will often fall back on such obvious statements as 'We must provide the best education possible in our schools' or, equally vague, 'Our policy is to see that every child develops to his full potential.' While educational objectives cast in such terms express worthy sentiments, they are so general and unlimited as to justify any kind of educational program at any cost. They fail entirely to provide criteria for judging among different kinds of educational programs, each of which may be desirable in its own right though each varies in cost and serves different ends.

On the other hand, we hear regularly and often vociferously from those in education who are chiefly concerned with keeping costs down and whose principal aim for education—though they hate to state this openly—is to limit educational expenditures. Since education engages more people than any other enterprise in Canada and takes the largest slice (twenty-one cents out of the dollar) from all tax monies collected in the country, the objectives of the cost-conscious people among us have substantial justification.

I am not suggesting that all matters of educational policy and expenditure be decided by placing greater emphasis on either educational or financial values. I am suggesting that there exists a real and necessary tension between our educational goals and our ability or willingness to achieve them. Under these circumstances, I feel it is better to recognize that these two values—the educational and the monetary—underlie all policies developed for school systems and that each policy must be evaluated in terms of both values.

A few years ago in a series of seminars sponsored by the Ontario School Trustees' Council, the deliberations opened with a mock board meeting, in which the Lansdowne County Board of Education tried to decide whether a program of oral French should be introduced into its elementary schools. As might be expected, the debate raged on between those who saw all kinds of benefits resulting from such a program and those who saw it as an expensive and unnecessary frill. Since the Lansdowne board had spent little if any time in considering the objectives of such a program, how the objectives might fit into a broader statement of objectives for the county school system as a whole, or the cost of implementing the program, those watching this mock presentation were not surprised when the board concluded its business by snapping up the opportunity to buy forty-eight tape recorders cheaply from a local supplier. The basic policy question of whether to adopt the oral French program and at what cost was left unresolved. We may smile at the exaggeration in this scenario and claim it doesn't happen that way in real life. But there is enough truth in this portrayal of policy making to give us pause.

In fact, many school systems in this province have embarked on large-scale and expensive programs in oral French without having clearly formulated objectives for these programs and without knowing in advance their ultimate cost. Although the evidence is unsystematic and impressionistic, there is growing recognition in the province that whatever else the present oral French programs in elementary schools do, they do not produce students whose skills in oral French are noticeably different from those of students who have had no such instruction at all.

Let me be quite clear here. I am not campaigning against oral French in the elementary schools. Far from it. My point is that we should not adopt programs unless we know clearly what purposes they serve, what they cost, and how effective they are.

If school systems do not have such knowledge, they must expect more arbitrary controls on expenditures from senior governments or from exasperated taxpayers. For myself, I am convinced that policy setting under such conditions will not serve education well and that school systems must therefore engage in more thoroughgoing policy analysis and evaluation than has been common in the past.

**Planning and Policy Analysis**

Policy analysis applied to education requires that we look at both the educational and financial implications of the decisions we make. It requires that we look at educational objectives and programs in terms of the resources they expend. And it requires that we look at money spent in education not in terms of the buildings that it buys or the salaries that it pays but in terms of the resources that support programs to achieve educational ends. Policy analysis arises when we try to plan in education; it comes from examining the alternatives open when we set objectives and develop programs to achieve them. The alternatives include not only different programs and costs but also different objectives and different outcomes. In considering alternatives, we must ask: 'What do we want to do?' 'How will we do it?' 'How well do we wish to do it?'

Thus, planning contains three simple elements that are more easily described than carried out in a school system. It involves setting educational objectives, implementing programs to achieve them, and determining the actual results of these programs. But planning is never finished because the results of educational programs inevitably fall short of the objectives set for them and because new objectives and programs are continually evolving. Therefore, planning thrusts us into consideration of alternative plans and into analysis of policies for implementing them.

Planning and analysis have not been done consciously or competently, and they must be improved if we are to balance our desire for quality in education with our ability and willingness to pay for it. I shall illustrate this point by referring to two recent events in Ontario education. In one case, a number of mothers with children in an inner city school asked how it came about that their children ended up in special classes and why these classes apparently failed to teach them to read despite the generous resources expended on these classes. In another case, there was consternation and puzzlement when a high school teacher demonstrated that most of his class could not correctly change a number expressed as a simple percentage into a decimal. These examples have important implications for planning and policy analysis in that they force us to think about educational objectives — the things schools are supposed to do.

## An Approach to Planning and Policy Analysis in the Borough of York

Three years ago a group of researchers from OISE and the Systems Research Group began to work closely with officials on the Board of Education for the Borough of York to develop designs for planning education and analyzing policies for the school system. The designs we have been working on involve processing considerable information and, for this reason, much of our work has been directed at creating computer systems that will enable a school system to use the large volumes of information generated in its complex operation by summarizing and presenting it in ways that are simple yet meaningful.

Our first task in the project was to build a model of a school system that would emphasize the relations between objectives, programs, and resources. The model in figure 1 contains three ways of looking at educational programs offered in York Borough. Two of the dimensions in the model represent conventional ways of conceiving educational programs in that they feature grades on the one hand and kinds of schools or education on the other. Across the face of the model, however, programs of another kind are displayed. Implicit in these programs are a set of educational objectives that cut across the entire school system and apply to all kinds of schools, classes, and grades. For example,the first program, intellectual and communication skills, deals with the development of skills that enable a child to acquire knowledge and to share it with others. The program is also subdivided into components, which further define the skills included in it. The remaining three broad programs deal with the acquisition of knowledge about the environment, the development of the individual, and the transmission of social and cultural ideals. These four programs express a set of fundamental objectives implicit in the educational aspirations and curricula of many school systems. The fact that these programs seem novel and yet express fundamental objectives often endorsed for education underlines the common failure of school systems to relate the things their resources buy—such as buildings and teachers—to the ends that these resources are to serve.

In understanding how this model works, it is important to realize that we perceive it as containing all the resources that a school system expends in support of its programs and in pursuit of its objectives. In this way it becomes possible to ask, 'What resources do programs in our school system consume and what educational objectives do these programs serve?' It is also possible to ask, 'How effective are these programs in meeting our objectives?' Unfortunately this last question is more difficult to answer than the first.

In order to use the model shown in figure 1 it is necessary to have information about all the resources of the school system and the policies that govern their expenditure. We have therefore made a catalog of basic instructional activities that go on in a school system; for example, a field trip for an elementary science class is one kind of activity, a class in grade 9 mathematics is another, and shop work in auto mechanics is a third. Altogether we identified over 140 activities in the York school system. We also determined the policies that govern the use of resources in the school system and the demand for educational services of various kinds.

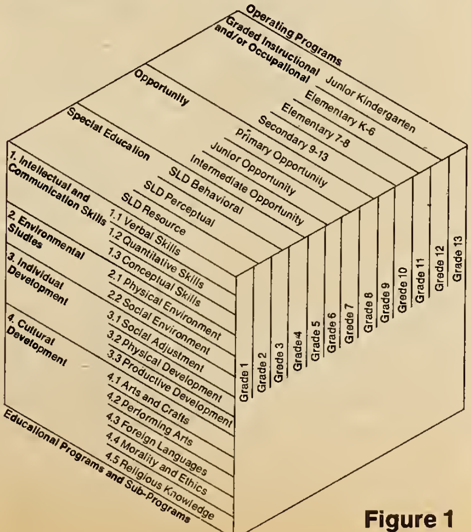

**Figure 1**

### Analyzing the Application of Present Resources

The first step in applying ideas of educational planning to a school system is to analyze the way in which resources are now being used in the school system. The next step is to project the way in which the resources needed to maintain the system will change in future years. Thus, the questions to ask are where the money is going and where it will go in future if present policies are continued. In framing these questions, the educational planner gets more useful information by asking how resources are consumed by educational programs in pursuit of objectives rather than by asking merely what expenditures the school system makes. These questions can be readily answered in the planning model developed for York (see tables 1 to 5).

We began our analysis by making summary reports of expenditures to be expected in York over a five-year period. Since we began our work in 1969, these summary reports covered the period to 1974. The summaries showed the number of staff, the amount of space, and total expenditures to be rising to meet increased demands for education created by increased enrollments and changing programs. A school system committed to educational planning will make such long-range forecasts each year and will compare this year's reality with previous years' forecasts in order to validate the forecasts and to improve the basis on which they are made if discrepancies appear. In the computerized model of the school system developed in York, it would be an easy matter to make more than one set of such projections, using different assumptions or information about enrollments and about the nature of programs as seen in their content, resources, or objectives. The educational decision maker then has more than one vision of the future in front of him and he can choose which one is most likely to become the reality with which he must cope.

In table 1 we see another kind of projection made over a five-year period. In this case, the table contains indicators of how resources are being applied according to existing policies. The picture here is one of relative stability, showing little change in student/staff ratios and even some decline in

**Table 1/Indicators of Resource Allocation in York Borough**

| *Indicators* | *1969/70* | *1970/71* | *1971/72* | *1972/73* | *1973/74* |
|---|---|---|---|---|---|
| *Student/Teacher Ratio* | | | | | |
| Junior School | 26 | 25 | 25 | 26 | 26 |
| Senior School | 20 | 20 | 23 | 23 | 24 |
| Composite School | 27 | 27 | 27 | 27 | 27 |
| Inner-City Junior | 27 | 28 | 28 | 28 | 28 |
| Inner-City Senior | 20 | 20 | 21 | 23 | 24 |
| Inner-City Composite | a | a | a | a | a |
| Secondary School | 17 | 17 | 16 | 16 | 16 |
| Opportunity | 13 | 12 | 12 | 13 | 13 |
| Occupational | 11 | 12 | 12 | 12 | 12 |
| *Student/Total Staff Ratio* | | | | | |
| Junior School | 18 | 18 | 18 | 19 | 19 |
| Senior School | 15 | 15 | 17 | 17 | 18 |
| Composite School | 20 | 19 | 19 | 20 | 19 |
| Inner-City Junior | 19 | 20 | 20 | 20 | 20 |
| Inner-City Senior | 16 | 16 | 16 | 18 | 18 |
| Inner-City Composite | a | a | a | a | a |
| Secondary School | 12 | 12 | 12 | 12 | 12 |
| Opportunity | 9 | 9 | 9 | 9 | 9 |
| Occupational | 9 | 9 | 9 | 9 | 9 |
| *Average Class Size* | a | a | a | a | a |
| *Cost/Student Ratio ($)* | | | | | |
| Junior School | 519 | 508 | 505 | 491 | 493 |
| Senior School | 673 | 667 | 590 | 579 | 566 |
| Composite School | 470 | 507 | 511 | 504 | 509 |
| Inner-City Junior | 501 | 481 | 481 | 474 | 471 |
| Inner-City Senior | 604 | 601 | 583 | 536 | 519 |
| Inner-City Composite | a | a | a | a | a |
| Secondary School | 937 | 923 | 947 | 934 | 947 |
| Opportunity | 1320 | 1347 | 1334 | 1320 | 1307 |
| Occupational | 1311 | 1282 | 1238 | 1198 | 1157 |

a/ Data incomplete

**Table 2/Expenditures on Educational Programs in York Borough, 1969/70**

| | *Expenditures in $* | | |
|---|---|---|---|
| *Program* | *Elementary Schools* | *Secondary Schools* | *Total* |
| Intellectual and Communication Skills | 4,482,501 | 1,137,786 | 5,620,287 |
| Environmental Studies | 761,470 | 1,370,729 | 2,132,199 |
| Individual Development | 2,597,836 | 3,603,352 | 6,201,188 |
| Social and Cultural Development | 2,415,919 | 1,166,903 | 3,582,822 |
| Total | 10,257,726 | 7,278,770 | 17,536,496 |

Note: Excludes Frank Oke and York Humber

cost/student ratios. These summaries reveal just as clearly, however, that resources are applied quite differently in the various school programs offered by York.

In table 2, we may see how educational resources are applied in York when they are seen as supporting the programs that express four basic objectives in education. In this case sharp differences appear between the patterns of expenditure in elementary and secondary schools. In elementary schools most of the resources go to the Intellectual and Communication Skills Program while in secondary schools most go to the Individual Development Program. While these allocations confirm what many would regard as the basic functions of elementary and secondary education, this analysis raises some pointed questions on evaluating the allocation. 'How well do these programs achieve their objectives?' 'What resources are required to meet desired standards of achievement in these programs?' Further questions of this kind arise when we examine the allocation of resources displayed in tables 3 and 4. In these tables, the resource considered is the amount of time schools devote to instruction related to the four educational programs. A striking feature of these tables is shown in the fact that schools have considerable latitude in determining the emphasis placed on one or other of these programs. We may see these variations as decisions schools make in applying more resources to the achievement of certain educational objectives than to others. In this regard, it is apparent that the elementary schools of York have—or perhaps use—greater latitude than do the secondary schools in deciding which educational objective to emphasize.

It came as something of a surprise to officials in York to note the variations in their programs, especially in the elementary schools where some schools were found to be placing a relatively light emphasis on programs in which local community needs would appear to require a heavy emphasis. Thus, we may recognize that although these descriptions of resource allocation in school systems raise questions rather than answer them, the process of finding out where the resources go leads to questions that might not otherwise be raised and forms a sound basis for policy analysis and program development.

In table 5 we have a final example of analyzing the application of resources in York under existing policies. In this case, we return to the oral French program in the elementary schools. Like many school systems, York decided to implement this program incrementally, beginning with instruction in grade 8 and adding instruction in the next lower grade each subsequent year. In 1969/70, when we first analyzed the cost of this program, instruction was offered in grades 3 to 8 inclusive. This program cost $342,000 and required twenty teachers giving instruction in twenty rooms. In order to complete the extension of this program to grade 1 over the next two years, the total cost would rise to $553,000 for thirty-three teachers instructing in twenty-six rooms. Since we are likely to look only at the initial costs of incremental programs, this analysis highlights the need to project the costs of such programs into the future.

### Analyzing Alternatives

We have now considered how resources are applied in a school system under present policies. While such analysis is

**Table 3/Percentage of Scheduled Instruction Time Devoted to Four Educational Programs in the Elementary Schools of York Borough**

| | *Instruction Time* | | |
|---|---|---|---|
| *Program* | *Average* | *High* | *Low* |
| Intellectual and Communication Skills | 43.62 | 56 | 27 |
| Environmental Studies | 7.41 | 17 | 3 |
| Individual Development | 25.28 | 35 | 21 |
| Social and Cultural Development | 23.50 | 38 | 14 |

**Table 4/Percentage of Scheduled Instruction Time Devoted to Four Educational Programs in the Secondary Schools of York Borough**

| | *Instruction Time* | | |
|---|---|---|---|
| *Program* | *Average* | *High* | *Low* |
| Intellectual and Communication Skills | 15.63 | 19 | 8 |
| Environmental Studies | 18.83 | 23 | 14 |
| Individual Development | 49.50 | 58 | 40 |
| Social and Cultural Development | 16.03 | 18 | 11 |

**Table 5/Cumulative Resources Required in York Borough for Extending the Elementary School French Program**

| | | *Resources Required* | | |
|---|---|---|---|---|
| *Year* | *Grades* | *Cost* | *Teachers* | *Rooms* |
| 1969 | Grades 3-8 | $342,000 | 20 | 20 |
| 1970 | Grades 2-8 | $449,000 | 26 | 22 |
| 1971 | Grades 1-8 | $553,000 | 33 | 26 |

important, some of the most interesting questions arise when the effects of applying alternative policies are considered. Tables 6 and 7 present the results of what might be called policy experiments. Instead of conducting these experiments by implementing actual policy changes in the school system and waiting to see what effects these changes have upon resource requirements, alternative policies may be tested quickly and easily by using the computerized analytic capabilities of the school system model. In this way, educational decision makers can test the impact of alternative policies and select for implementation the one that best fits the objectives of the school system, the resources available, and the practical realities of the situation. This approach to planning and policy analysis is the antithesis of the 'muddling through' theory, which relies upon intuition and the sanguine hope that everything will turn out right in the end.

Table 6 presents four alternative policies dealing with teacher work load and class size in York. Column 1 projects the base case, the requirements for teachers and rooms under present policies, over a five-year period. As would be expected, a policy decreasing teachers' instructional hours by 10 percent increases the number of teachers required sharply while a policy increasing class size by 10 percent decreases both the number of teachers and rooms required, as compared to present policy. Finally, in column 4, we may see a projection for a policy that combines a reduction in teacher work load with an increase in class size. In this case, the demand for resources is greater than that required by the existing policy, although the amount of the increase would be difficult to predict from a knowledge of the effects of the other policies.

Table 7 presents the effects of alternative policies on classroom utilization and length of the teaching week. Here we may see that alternative policies on these matters have strong impact upon the physical facilities required in a school system and therefore upon the resources required to operate the system. It may be that none of these policies is a practical alternative to present rates of space utilization in schools, but this kind of analysis does highlight the price we pay for our present policies on the utilization of time and space.

In all of the analyses presented in the these tables, the policies considered had strong impact upon the programs and resources of the York school system. The issues considered were not peripheral matters that make very little difference in the application of resources in the school system. One of the common criticisms made of school boards — and also of other elected political bodies — is that they spend hours arguing over some special expenditure amounting to a few dollars and then pass the rest of the budget, amounting to millions of dollars, in a matter of minutes. Something of this approach, which puts topsy-turvy priorities on what expenditures are important, may be seen in the response of school boards to the budget guidelines imposed in Ontario. Under compulsion to restrict expenditures, some boards took the approach of chipping away the most easily dispensable items while failing to assess how resources are applied throughout the system as a whole and failing to consider alternative policies.

I wish to emphasize, too, that the computerized planning model described earlier does not do any thinking itself. It is a tool only but one that can be used to organize information meaningfully for policy analysis and planning. At the present time, the computerized model is no longer being used in York. This does not mean, however, that York has abandoned planning and policy analysis. On the contrary, the effect of using the model in this project has caused York to consider entirely new kinds of problems in setting educational objectives, developing programs, and allocating resources.

### Objective Setting and Evaluation

I have left to the end the most important and difficult questions in planning. As defined earlier, planning has to do with setting objectives, developing programs to achieve them, and determining the effects of these programs. I have indicated how these three elements may be related through policy analysis, but I have failed to say how to identify educational objectives or how to assess whether school programs achieve these objectives. These are indeed the important questions and the difficult ones to answer.

Upon analyzing where educational resources are spent, it soon becomes apparent that it is impossible to make decisions about the adequacy of educational programs and their resources

### Table 6/The Impact on Resources of Alternative Policies on Teacher Work Load and Class Size in York Borough

| | 1 | 2 | | 3 | | 4 | |
|---|---|---|---|---|---|---|---|
| *Number of Teachers Required* | | | | | | | |
| *Year* | *Base Case* | *Teaching Hours Reduced 10%* | | *Class Size Increased 10%* | | *Both 2 and 3* | |
| 1969/70 | 976 | 1087 | (+111) | 905 | (–71) | 1003 | (+27) |
| 1970/71 | 1008 | 1121 | (+113) | 933 | (–75) | 1035 | (+27) |
| 1971/72 | 1037 | 1154 | (+117) | 966 | (–71) | 1070 | (+33) |
| 1972/73 | 1087 | 1207 | (+120) | 1008 | (–79) | 1120 | (+33) |
| 1973/74 | 1101 | 1223 | (+122) | 1017 | (–84) | 1132 | (+31) |
| *Number of Rooms Required* | | | | | | | |
| 1969/70 | 920 | | | 852 | (–68) | | |
| 1970/71 | 953 | | | 882 | (–71) | | |
| 1971/72 | 978 | | | 912 | (–66) | | |
| 1972/73 | 1015 | | | 948 | (–67) | | |
| 1973/74 | 1032 | | | 951 | (–81) | | |

Note: Numbers in parentheses show change from base case.

### Table 7/Effects on Space Requirements in York Borough under Alternative Policies on Classroom Utilization and Length of Teaching Week

*Number of Rooms Required*

| *Year* | *Base Case* | *Utilization Decreased 15%* | | *Length of Teaching Week Increased 25%* | |
|---|---|---|---|---|---|
| 1969/70 | 920 | 1093 | (+173) | 754 | (–166) |
| 1970/71 | 953 | 1129 | (+176) | 784 | (–169) |
| 1971/72 | 978 | 1159 | (+181) | 801 | (–177) |
| 1972/73 | 1015 | 1206 | (+191) | 835 | (–180) |
| 1973/74 | 1032 | 1220 | (+188) | 848 | (–184) |

Note: Numbers in parentheses show change from base case.

without knowing what objectives these programs and resources are to serve and how well they serve them. Early in the project at York, the research team sat down with the school trustees and tried to convince them of the importance of defining their objectives so that the process of educational planning could begin. We now know that this approach is not effective, since however much a person believes he should have educational objectives and however much he may believe he knows what they are, most people have great difficulty defining them in the abstract.

Thus the approach the research team ultimately took in York was to analyze the implications of existing policies and to discover as much as possible about the implicit objectives of programs operating in the school system. Then we began to elaborate on the educational program structure illustrated in figure 1 by defining specific objectives falling under each of the four broad programs and their several sub-programs. After referring to other contemporary work on the setting of educational objectives, we identified forty-nine specific objectives[1] that could be classified under the general program structure. These programs and objectives were then cast in the form of a questionnaire answered by various groups in York.[2] This questionnaire permits the individual to express how important he believes each of the forty-nine objectives are for elementary schools. We hope, with modifications based on current use, that the questionnaire may also be applied to secondary schools. As an end product, we see a general structure of programs and objectives applying to the York system as a whole and serving it as a basis for planning, curriculum development, and evaluation.

The questionnaire results so far suggest that it is possible to bring the question of setting educational objectives out of the realm of abstraction and into an area where vivid meanings may be attached to it. They suggest as well that it is possible to link analyses of how we apply our resources in education with programs that have specific and well-defined objectives.

Finally, let us look at the implications for evaluation contained in the ideas and procedures I have discussed to this point. As stated earlier, evaluation is one of the unsolved problems in education. Perhaps we can at least see the route we must travel in making evaluations of expenditures if we can identify objectives for which we are spending resources and clarify the programs and policies through which we spend them. Through the questionnaire we can obtain priority ranking of objectives, and we can then relate these objectives to programs for accomplishing them and to the cost of the resources these programs expend. What remains in order to make an evaluation of these programs is to determine the effects of the programs and to judge the effects in relation to the objectives and costs involved in operating them. It is unnecessary to evaluate continuously every objective and every program in a school system. Instead, a school system's needs for planning and policy analysis would likely be satisfied if it selected for evaluation its most expensive programs and those that serve its most and least important objectives. Or the system might choose to evaluate only alternative programs that serve the same objective. By making evaluative efforts of this kind, school systems would close the planning cycle, which leads through objective setting to program definition and assessment of outcomes. Only by entering into this process of analysis is it possible to relate educational objectives, programs, and resources, and only in this way is it possible to reduce our uncertainties about the value of educational expenditures.

The ideas in this article may appear utopian to many and far from the realities of policy making and administration in school systems. All I can say in response to such objections is that we are working to change these ideals into realities in the Borough of York and that what becomes possible in one school system may become a necessity in others.

**Note:** The previous article has been abstracted from *The Planning Process: A Systems Perspective for School Boards,* edited by J. Glenn Scott and David J. Ducharme. This book is being published by the Department of Educational Administration in cooperation with the Office of Field Development, OISE. It includes the proceedings of an OISE-OSTC conference, 'Financing Public Education in Ontario: Analyzing Choices for Effective Planning,' held in May/June 1971. Copies (price $2.50) may be obtained from Publications Sales, OISE, 252 Bloor Street West, Toronto.

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[1] Adapted from *Choosing Goals* (Elementary School Evaluation Kit, Booklet II. Los Angeles: University of California at Los Angeles, Center for Study of Evaluation, 1970).

[2] T. B. Greenfield, *Developing and Assessing Objectives for School System Planning* (Toronto: Informal publication of the Department of Educational Administration, OISE, 1972).

# Canadian Public Figures on Tape

## a new series from OISE

Marian L. Worthen,
Editorial Division, OISE

Too many students in our schools think of history as something contained in the musty pages of a book – it's what happened to other people in another age, it has little relevance to life in Canada today.

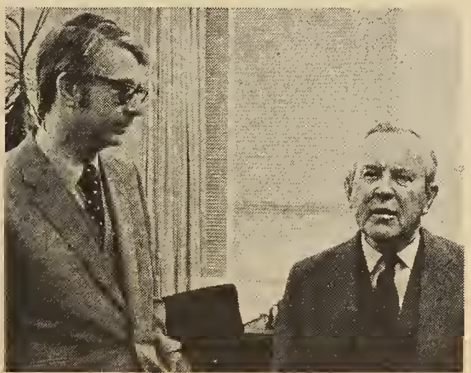
OISE's new series, Canadian Public Figures on Tape, now brings new life to Canadian history. In interviews exceptional for their warmth and candor, Canadian public figures talk about the early events that formed their ambitions, the crises and characters they encountered along the way, and their hopes and fears for the future. Each one offers a behind-the-scenes experience, a chance to see beyond the printed word and to hear the actor defend the part he played and the path he followed in Canada's national and international roles.

Four men begin the interview series: Lester Pearson, international negotiator, Nobel Peace Prize winner, and fourteenth prime minister of Canada; T. C. (Tommy) Douglas, premier of Saskatchewan, a leading member of the House of Commons for over twenty years, and former leader of the New Democratic Party; John Diefenbaker, thirteenth prime minister of Canada, who came thundering out of the West to take up such issues as the Pipe Line and the 'one nation' concept for Canada; and Walter Gordon, fiscal authority and prime mover in the struggle to keep Canada for the Canadians. Other Canadians – men and women who have put their mark on various facets of Canadian life – will join the ranks as new interviews continue to be produced. Richard M. Alway, who is a historian, a student of national affairs, and a trustee of the Canada Studies Foundation, conducts the interviews, posing questions that seize on those points most revealing of the man and the event.

In addition to the straight interviews there is a discussion between J. R. (Joey) Smallwood, former premier of Newfoundland, and Jack Pickersgill, member of the Pearson Cabinet, on the struggle to make Newfoundland the tenth province of Canada. With Smallwood in the 'starring' role and Pickersgill as 'straight man,' the result is an hour and a half of sparkling dialogue, often humorous and always informative. It is a living record of the maneuvering and political compromise so often needed to effect constitutional and political change; so it must have been in 1867 when Sir John A. Macdonald conspired to bring about the confederation of Canada.

While it is true that some of these public figures have been interviewed in the past, records of such interviews are usually salted away in the archives of broadcasting companies or private organizations and are very seldom used. The tapes in the OISE series are on sale. They can be integrated into social studies programs, particularly at the high school level; they are applicable to university courses on Canadian government; they would be of interest to organizations concerned with Canadian Studies and to private collectors of Canadiana. But, most of all, the tape project was conceived with the idea of putting the 'now' into Canadian history, of making it come alive for the student through the voice and expression of the person who helped to mold that history. It should be noted that one of OISE's intentions in building up this bank of tapes is so that they can be made available, fifteen to twenty years from now, to a whole new generation of students – to whom such names as Pearson and Diefenbaker will likely be looked upon as belonging to the era of Macdonald and Laurier.

As an example of the interview format, Pearson's talk about his boyhood and career, about his entrance on the international scene, is highly informative. 'I don't recall being intimidated spiritually or in any other way by my Methodist parents. We didn't have much money and I used to long for a bicycle, but I was never deprived of the important things. I was saved from being too studious by being interested in games.' Mr. Pearson was both student and professor at the University of Toronto, and he was also a student at Oxford – 'the two happiest years I had.' He came out of World War I with a deep conviction: 'I felt that whatever I was doing in civil life, I should do what I could to keep this from happening again.'



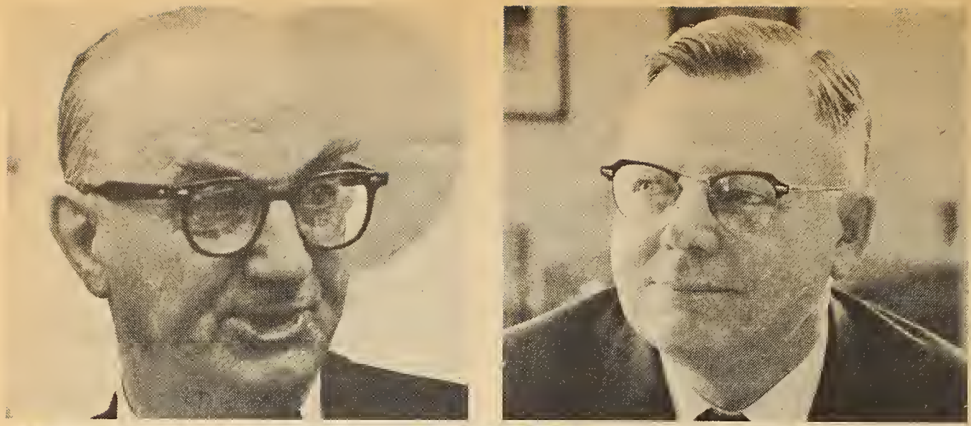
Lester Pearson during a break in his taped interview with Richard Alway

This conviction stayed with him when he joined the new Department of External Affairs in 1928 and took part in the League of Nations' meetings. 'I was really quite an isolationist in those days. I changed when I began to realize what Hitler and Nazism meant.' Events during the next few years led to the involvement of Canada in World War II. 'Canada's national war effort was the most dramatic and impressive evidence of unity in achievement of the important goal – the main goal was victory in war. It was greater than anything we had done in peace, and it is a tragedy that it took war to bring it about.'

Mr. Pearson came to be closely associated with a number of Canadian leaders during his long career, and his assessment of them is perceptive and revealing. He speaks of R. B. Bennett as 'decisive and explosive'; of Mackenzie King, with whom he had the longest association, as a subtle and complex man; and of Louis St. Laurent as 'a fine character and the most generous, unselfish personality I have ever met in public life.'

In Lester Pearson, Canada had a most distinguished and effective foreign minister, one of the most highly respected on the international scene. It was inevitable that he should have played an active part in the United Nations. 'King didn't feel that the UN was going to work . . . . St. Laurent believed wholeheartedly in collective cooperation and that Canada should play an active part. There have been small conflicts which, if it had not been for the UN, might have become big conflicts.'

In his retirement role as political philosopher, Pearson looks back on Canada's part in bringing an international police force into being during the Suez crisis as the greatest service he was able to perform in the world arena. On the domestic front, he puts the creation of a Canadian flag at the top of his personal list of achievements as prime minister, along with the establishment of a pension scheme 'with the consent and support of all the provinces.' He sees our relations with the United States as the most important issue facing us next to national unity. 'We have got to come to terms with it and retain our special Canadian status.' On the subject of a world conflagration,



Joey Smallwood and Jack Pickersgill whose discussions as to how Newfoundland came into confederation is the subject of one of the tapes

his outlook is hopeful. 'The danger of war now is a deterrent in itself. Man is not going to use the weapon that would destroy himself.'

If the Pearson tape, in its diversity of topics and its revelation of the man, is representative of all the interviews conducted by Mr. Alway, the Smallwood-Pickersgill tape, by contrast, has all the immediacy of a current report. It emphasizes imaginative qualities, the wiles of a politician that are needed to bring about the consummation of a political dream. The tape is a unique record of what happens when a Crown Colony is detached from one country to become the province of another. Although Mr. Smallwood and Mr. Pickersgill are talking about an event that took place twenty-three years ago, the vitality and enthusiasm of the telling is such that it seems as though they must be speaking of something that happened yesterday. One never loses the sense of history-in-the-making, of the great accomplishment that was achieved through efforts that appear both comic and calculating.

'It all began in Newfoundland on a walk.' From such casual encounters so often spring the seeds of a great endeavor. During their walk, Joey Smallwood and Solicitor General David Bradley articulated the idea of turning Newfoundland from a Crown Colony of Great Britain into a province of Canada. There was much to be gained on both sides, as they saw it. The need to have Newfoundland as part of Canada had been recognized at the outbreak of World War II. In peace, it would mean access to new resources and better trading opportunities. Newfoundland, in the grip of a depression, could recover its economic well-being as part of a federal-provincial structure.

Smallwood journeyed to Ottawa as 'confederate agent' to lay the groundwork but, to his surprise, Canada didn't take up the suggestion eagerly. The attitude in Ottawa was 'they're starving– let's take them and feed them.' Back on the home front there was more opposition–and many old-time Newfoundlanders felt they would be doing Canada a favor to join. In the Canadian contingent, there was only a small enclave for confederation: cabinet members Louis St. Laurent, Brooke Claxton, and C. D. Howe; Jack Pickersgill, then special assistant to the prime minister, who would one day represent the Newfoundland Riding of Bonavista-Twillingate; Lester Pearson, at that time undersecretary of state for External Affairs. Characteristically, Mackenzie King did not show his hand. The group who opposed confederation was led by 'Maritimer' J. L. Illsley, minister of finance, who was concerned about the viability of fitting another Maritime province into a federal-provincial picture. Eventually, a kind of Canadian consensus was obtained, and Smallwood went back to Newfoundland to fight for his proposal in a convention that lasted eighteen months.

There were several issues of paramount importance: the Newfoundland school system (which, from the beginning, had been under church jurisdiction) and the laws governing divorce. And perhaps of much more importance to the average man, there was the question of consumer goods. Would they still be able to manufacture margarine? Would the price of plug tobacco go up? Underlying all of this was the basic question as to whether or not Great Britain would grant Newfoundland permission to break away. And if so, would the people of Newfoundland agree? 'The people of Newfoundland were to be given an opportunity to decide for themselves,' says Smallwood, 'what form of government they would have for the future, and the way they were going to do it was the secret ballot referendum, in which all citizens would be entitled to vote. On the ballot there would be no names, only forms of government.'

To ensure the involvement of all Newfoundlanders, the convention proceedings were recorded and then broadcast for three hours every evening, the people in the cities and the outports gathering in each other's homes to listen. For a time, the 'anti-confederates' tried boycotting convention sessions by leaving them short of a quorum, but old pro ex-broadcaster Smallwood was more than equal to the occasion. As the hall began to empty, he kept up a running commentary, naming those who had left, filibustering until they were forced to return. 'They couldn't remain anonymous.' In addition he covered the outports by seaplane, speaking to groups he knew to be in favor of confederation so that only the voice of assent would be heard in the land. Feeling ran so high throughout the province that for many months he was followed everywhere by three bodyguards. As Smallwood said, 'It was a tremendous exercise in popular education.'

Finally the vote was cast and the results were extremely close: 51 percent for confederation and 49 percent against. There followed in Ottawa a little byplay that served to underscore the victory. Mr. Pickersgill, having been informed of the slim margin of the vote and knowing Mr. King's great sense of caution, undertook to look up a few facts on his own. He says, 'Mr. King called me around ten o'clock and said, "What do you think of the outcome in Newfoundland?" I said, "It's a triumph, a great triumph – overwhelming. Do you realize that a higher percentage of the people voted for confederation than ever voted for you, except in 1940, and it's almost the same as 1940?" There was a quiet, long pause, and then Mr. King said, "Is that true? Have you worked out the figures?" I said I had. "Well," Mr. King said, "that puts a different light on it."'

Eventually, everything was settled, and just before the stroke of midnight on March 31, 1949, Newfoundland became Canada's tenth province.

This, of course, is but a capsule description of the Newfoundland story. Mr. Smallwood, in his reedy voice, describes the constitutional and political ramifications of a Crown Colony's withdrawal from one nation, of its entrance into another, and of the in-between options that some of the Newfoundlanders were seeking. Mr. Pickersgill, with his dry and subtle wit, enters the dialogue to remind, to cast an aside, and occasionally to assume command of the story telling.

The tapes, varying in length from an hour to an hour and a half, are available from Publications Sales, The Ontario Institute for Studies in Education, 252 Bloor Street West, Toronto 5, Ontario, in both reel-to-reel tapes and cassettes, at $6.00 each. (Pearson, Diefenbaker, and Smallwood-Pickersgill are produced on individual tapes; Douglas and Gordon are combined in one.)

Doris W. Ryan and Edward S. Hickcox

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# Involvement where it counts

Any educator these days is aware of two major concerns about school administration that permeate discussions among scholars, teachers, administrators, and the general public. The first is the drive by teachers and parents for participation in the decision-making process and the second is the drive by teachers toward professionalism, implying an obligation for a measure of accountability.

Historically, the decision-making process in Ontario and elsewhere has been the prerogative of the local board of education and school officials. This tradition is slowly changing in response both to current teacher demands and to evidence that the best kinds of organizations are those in which the members identify with the organization and its objectives and have a high sense of involvement.

### Signs of Unrest

Signs of unrest among teachers are indicated in an exploratory study of the pressures felt by a sample of principals in Ontario (Thom, 1972). Eleven elementary and secondary school principals in Metropolitan Toronto identified pressures from the school staff and from students as those they felt most strongly over the school year. In coping with staff pressures, the principals often introduced some form of staff involvement in decision making as well as delegation of authority and the opportunity for negotiation on controversial matters. The responses of some of the principals suggest that such coping tactics raise questions about responsibility and accountability.

We can describe the dilemma in more general terms. Studies of business and industrial organizations indicate that wide participation in decision making enhances member commitment to the organization and heightens satisfaction, enthusiasm, positive attitudes, and productivity. Similar studies related to schools support the idea that participation by teachers in decision making produce positive outcomes for the organization. For example, Bridges (1967) cited studies by Chase (1952) and Sharma (1955) relating participation to teacher enthusiasm and satisfaction. In his own study, Bridges (1964) found that teachers preferred principals who involved their staffs in decision making, regardless of whether the teachers had a high or low need for independence. He concluded that teachers expect autonomy because they perceive themselves as professionals.

In light of the evidence favoring teacher participation in decisions, school principals may be prone to delegate a great deal of authority to teachers. There are problems, however, and a 'wholesale' approach to shared decision making could have detrimental effects. As we have already indicated, principals perceive a dilemma as to their own responsibility when they must give up some of their traditional authority. Furthermore, shared or group decision making is often a painfully slow process, and teachers tend to resent excessive committee work or attendance at meetings outside school hours. Bridges (1967) suggests that teacher resentment toward participation will tend to occur when teachers are involved in decisions they feel the principal is being paid to make. He argues that teachers have a 'zone of indifference' within which an administrator's decision will be accepted without question.

### Relevance and Expertise

Effective participation, Bridges (1967) argues, will come only in decisions that lie outside the teachers' 'zone of indifference.' The difficulty, of course, is deciding which decisions are in that category and hence of concern to teachers.

In order to determine those decisions in which teachers should be involved, Bridges suggests the application of two tests: the test of relevance of the decision to teachers and the test of teacher expertise.

With regard to relevance, when the teachers' personal stakes in the decision are high, their interest in participation should also be high. Decisions dealing with classroom affairs, such as class size, are probably in this category. With regard to expertise, teachers are unlikely to be interested in matters outside their scope of experience and sphere of competence, such as the technical specifications of a language laboratory or the type of boiler to install in the school.

No! Please! You make the decision

### Some Evidence in Ontario

At a recent workshop attended by 104 elementary teachers, 70 secondary teachers, and 14 administrators from a county system in Ontario, the authors directed sessions designed to stimulate discussion on teacher participation in decision making.

The authors made presentations in which the idea of the teachers' zone of indifference was discussed as it related to teacher involvement in decision making. Following the presentations, the participants broke into small groups to discuss the appropriate areas of desired involvement. There were ten groups, nine of which were made up of elementary and secondary school teachers and one of which was made up of the fourteen administrators.

A questionnaire administered to each of the groups asked the participants to consider their place in fifteen problem situations typical of those occurring in schools. The assumption was that the desire for involvement would be in areas outside the zone of indifference– i.e., those situations that met the tests of teacher expertise and relevance.

The situations, which were not intended to cover all those in which teachers might be involved, included such problem areas as planning an open house, evaluating student progress, hiring new teachers, reassigning teachers, student behavior, introduction of volunteer aides, and implementation of curriculum content. The participants were asked to select from a list of four methods the one they preferred to use in resolving each of the problems. The four methods listed were:

1) The principal makes the decision and announces it to the teachers.
2) The principal makes a tentative decision and then asks for the reactions of the teachers. He reserves final judgment for himself.
3) The principal describes the situation to the teachers, asks them to suggest solutions, and then selects the solution he regards as most promising.
4) The principal lets the teachers involved make the decision.

For purposes of analysis, methods 1 and 2 were categorized as 'low teacher involvement,' since in both of these the principal clearly reserves the decisions for himself. Methods 3 and 4 were put in a category of 'high teacher involvement,' since they assume varying degrees of teacher participation in the decision.

**TABLE 1**
**Percentage of Teachers Favoring High Involvement in Decision Making**

|  | All Teachers | Elementary Teachers | Secondary Teachers |
|---|---|---|---|
| Problem Area | $N = 174$ | $N = 104$ | $N = 70$ |
| **c** implementation of curriculum content | 92 | 90 | 96 |
| **f** introduction of volunteer aides | 92 | 95 | 90 |
| **m** evaluation of student progress | 88 | 90 | 87 |
| **l** nature of assembly programs | 86 | 95 | 77 |
| **d** low achievement level on systems tests | 85 | 85 | 86 |
| **a** open house details | 81 | 92 | 63 |
| **j** student behavior on field trips | 81 | 86 | 75 |
| **h** audiovisual equipment policy | 79 | 80 | 75 |
| **o** establishment of advisory committee | 70 | 77 | 67 |
| **g** paraprofessionals replacing teachers | 69 | 70 | 66 |
| **k** number of assembly programs | 69 | 81 | 55 |
| **b** reassignment of teachers | 56 | 58 | 55 |
| **n** student behavior in halls | 50 | 61 | 33 |
| **i** hiring of two new teachers | 33 | 28 | 40 |
| **e** replacement of vice-principal | 23 | 30 | 20 |

### *Areas of Preferred Teacher Involvement*

Preferences for areas of teacher involvement vary considerably, as indicated in table 1, which shows the responses of elementary and secondary school teachers on preferences for high involvement. The items are ranked from high to low, according to the combined results for elementary and secondary teachers. Percentages of participants favoring low teacher involvement (methods 1 and 2) can be obtained by subtracting the figures in the columns from 100. Thus, in item C, 92 percent of all teachers favored high involvement, meaning that 8 percent of the teachers favored low involvement.

The first point to be noted is that the teachers in general favored involvement in the problem areas listed. In only two areas did less than 50 percent indicate a preference for high involvement, namely, the hiring of two new teachers and the replacement of a vice-principal.

Looking specifically at the first five choices, we find three items having to do with curriculum or student matters. The item ranked second, introduction of volunteer aides, also has to do directly with what goes on in the classroom—the teacher's traditional prerogative.

Turning to the least preferred areas for involvement (or those the respondents felt should be the prerogative of the principal), we note that three of the last five items concern professional personnel. Although hiring, reassignment of teachers, and administrative selection have traditionally been areas reserved for administrative decision making, we might have expected the frequent discussions of teacher involvement in personnel selection to result in a higher ranking for these items. But for these particular participants, this was not the case. However, except for the last two items, the percentage of teachers desiring involvement is relatively high, indicating that the teacher's perception of his professional role includes some measure of involvement in personnel matters.

### *Some Surprises from the Elementary School Teachers*

We expected to find variations between elementary and secondary teachers in terms of desired involvement in decision making, and table 1 indicates that this expectation was upheld. What is surprising, however, is that, for all items except three, the percentage of elementary teachers preferring high involvement was greater than that for secondary teachers. The three exceptions were issues concerning implementation of curriculum content, low student achievement levels on system tests, and the hiring of new teachers. Only on the last item, however, was there a significant difference.

If, as is generally believed, secondary teachers in Ontario are more militant, more interested in involvement on crucial issues, more willing to speak out on issues, why do these data indicate that elementary teachers desire higher involvement in the problem areas listed? We can only speculate. It may be that the role of the principal in secondary schools casts him in a different light in the eyes of the teachers. With vice-principals, department heads, and coordinators of various kinds, secondary school teachers may perceive their immediate superiors as those who should have the decision power, while they as teachers concentrate on the classroom. Another point may be that most of the secondary teachers in this sample worked in a school that had been open for less than a year, and the operation of the school had not settled down sufficiently for them to be concerned about their prerogatives as teachers. Or, if we take the data as valid, perhaps elementary teachers are not so docile as we have been led to believe.

### *Potential Problems between Teachers and Administrators*

Table 2 compares the responses of the administrators attending the workshop with those of the total number of teachers. As in table 1, the areas of preference for high involvement are shown.

In nine of the fifteen problem areas, the percentage of administrators favoring teacher involvement was higher than that of teachers. In the remaining six areas, the percentage of teachers favoring teacher involvement was higher than that of the administrators. In four problem areas, the discrepancy was significant: setting up a school advisory committee of staff and parents, determining the number of assembly programs, student behavior on field trips, and low student achievement levels on system tests. In the last instance, 100 percent of the administrators felt that this was a matter for teacher involvement rather than principal involvement, as opposed to 85 percent of the teachers.

Where such discrepancies occur, there is potential for conflict. Thus, if teachers prefer not to be involved in a problem area and administrators don't see it the same way, it would seem advisable for both groups to discuss

**TABLE 2**
**Percentage Comparison of Administrators and Teachers Favoring High Teacher Involvement in Decision Making**

**GROUP A:** Administrators Higher Than Teachers

| Problem Area | Administrators *N*=14 | Teachers *N*=174 |
|---|---|---|
| **d** low achievement level on systems tests | 100 | 85 |
| **a** open house details | 93 | 81 |
| **h** audiovisual equipment policy | 93 | 79 |
| **k** number of assembly programs | 93 | 69 |
| **m** evaluation of student progress | 93 | 88 |
| **g** paraprofessionals replacing teachers | 78 | 69 |
| **b** reassignment of teachers | 64 | 56 |
| **n** student behavior in halls | 57 | 50 |
| **e** replacement of vice-principal | 35 | 23 |

**GROUP B:** Teachers Higher Than Administrators

| Problem Area | Teachers *N*=174 | Administrators *N*=14 |
|---|---|---|
| **c** implementation of curriculum content | 92 | 85 |
| **f** introduction of volunteer aides | 92 | 85 |
| **l** nature of assembly programs | 86 | 85 |
| **j** student behavior on field trips | 81 | 64 |
| **c** establishment of advisory committee | 70 | 50 |
| **i** hiring of two new teachers | 33 | 22 |

their differences.

## The Zone of Indifference

We stated as a basic assumption that teachers would prefer high involvement in those areas they perceive as being outside their zone of indifference. Relevance and expertise were the tests proposed to determine those areas. We cannot determine from our information, however, whether teachers are competent to make decisions in particular areas or whether the areas are relevant to their interests. One of the students from OISE who assisted in conducting the workshop explored this question in a later experiment. Poon (1972) asked ten graduate students in the Department of Educational Administration at OISE to indicate, for each of the fifteen problem situations, whether teachers would be competent to decide upon a solution (expertise) and whether the consequence of the decision would affect teachers to a great extent (relevance). These graduate students had all had teaching experience.

Poon compared the rankings of the problem situations by the teachers in this study (according to preference for high involvement) with the rankings of the ten graduate students (according to perceived expertise and relevance). He found a high correlation between the two rankings ($r = .790$). That is, areas in which the highest percentage of teachers desired high teacher involvement were those ranked by the graduate students as ones in which teachers had the expertise to make decisions and in which their involvement would be relevant. Thus, the assumption in this study was supported. Asking teachers to indicate involvement preferences in decision areas appears to be a viable way to meet the criteria for effective participation.

## Conclusion

In this article, we have touched only on the question of determining those decision areas in which teacher involvement might be appropriate, assuming that teacher involvement outside the zone of indifference contributes to the functioning of the organization. We do not have the space to discuss means of involving teachers in decision making, which is a crucial administrative problem. Which teachers does one involve in which decisions? How should they be chosen? Should there be a permanent teachers' council or ad hoc committees?

A number of other problems exist. One of the great concerns from the administrative point of view arises when teachers are desirous of involvement in an area that the central office has specifically assigned to the responsibility and authority of the principal. For example, involvement in reassigning teachers was favored by more than half of the sample, but where district policy and long tradition have made this the principal's responsibility, he may hesitate to give it up. In this case, if he were committed to the model we have described, he might have to engage in political activity at the central office level, such as exerting influence, obtaining support from other principals, and the like. To avoid unnecessary disruption and conflict, change of this kind must be carefully planned.

Also, staff members might not agree among themselves on what areas of involvement are preferred. In this case, the principal might promote a series of workshop discussions, perhaps using a questionnaire of the type described, to reach some kind of consensus.

In this exploratory study, we have considered the desire for involvement in decisions regarding fifteen typical problem situations in schools. The instrument, although imperfect in many respects, identified differences between the teachers as individuals, between elementary and secondary teachers, and between administrators and teachers. Exercises such as those described in this paper could prove useful in helping principals and teachers to determine those decision areas in which teachers could be effectively involved.

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# Belle langue française, Je veux te

Nos écoles de langue française ont été établies d'abord pour assurer que la langue de communication dans l'enceinte scolaire soit et demeure le français. Mais en Ontario et dans un milieu inondé par les média d'information anglophone, il faut être convaincu pour s'affirmer, il faut 'aimer' pour résister à la vague déferlante de l'anglicisation.

Aimer qui? aimer quoi? Nulle autre que cette belle langue française! Et quand on aime, on agit en conséquence; c'est pourquoi on a adopté le chant-thème suivant aux écoles de langue française à Welland:

*Belle langue française,*
*Je veux te bien parler.*
*Mon coeur se sent à l'aise*
*A te bien prononcer.*
*Refrain:*
*Il y a longtemps que je t'aime*
*Jamais je ne t'oublierai*

Et en ce soir du six juin, sous la treille et la fleur-de-lis, on pouvait lire ces lettres:

*Belle langue française,*
*Je veux te bien parler.*

C'était le grand Gala de Français, événement qui marquait le point culminant des efforts en français pour l'année 1971/72 et qui réunissaient parents et amis de nos jeunes du Jardin à la 13e année.

Le Grand Gala, c'est encore l'activité par excellence qui aide à développer la fierté de l'expression correcte dans sa langue maternelle. Cet effort délibéré que pose l'élève de monter sur l'estrade et d'établir une communication adéquate avec la foule de spectateurs est louable et efficace. Voyons dans quels domaines les jeunes de Welland ont pu tenter cette expérience bienfaisante de l'expression orale.

Au but!

**Au but!**
Dans l'Ontario, à Welland – comme partout ailleurs peut-être – l'emploi de l'anglais dans les jeux est presque chose normale. C'est que les jeunes n'entendent jamais à la télévision le vocabulaire français pour ces joutes, et l'imprimé français dans ce domaine ne tombe que rarement sous les yeux du gamin. Quoi de mieux donc pour les jeunes des 5e et 6e années que de simuler un jeu de balle-molle sur l'estrade, alors que les hommes 'dans le champ' sont dispersés dans la salle! Cette présentation revoit les termes français propres aux vêtements, à l'équipement et aux multiples réglements du jeu. Cette même idée peut être utilisée pour n'importe quel sport et même le vocabulaire employé peut fort bien être assez nouveau pour quelques sportifs dans l'audience. (Ces numéros, très différents des chants et danses présentés habituellement, plaisent à notre auditoire du sexe masculin).

**Rigolo**
Une autre formule, très agréable et basée sur une saine pédagogie tout à la fois, est la réplique du Laugh-In américain visionnée de façon assidue à la télévision. Les élèves des 7e et 8e années sont fascinés par les traits d'esprit et les devinettes de tous genres; ils savourent déjà en les collectionnant, cette joie de pouvoir faire rire l'autre. Voici quelques boutades qu'ils nous ont fait connaître:
—Ginette!
—Oui, François.
—Quelle différence y a-t-il entre un avion et des amoureux?
—Je n' sais pas, François.
—C'est bien simple: un avion décolle et les amoureux se collent.

—Paul, peux-tu m'épeler herbe sèche, ne te servant que de quatre lettres?
—Oui, c'est facile! F-O-I-N.

—Attention, les élèves! Ici c'est votre principal qui vous adresse la parole. Ce matin, il n'y aura qu'une demi-journée d'école.
—Oh-h-h-h!
—Cet après-midi, nous aurons l'autre demie.
—Ah-h-h-h.

C'est très bienfaisant psychologiquement de pouvoir enfin rigoler en français. De plus, quelle occasion magnifique s'offre ici pour une participation active de toute une classe non seulement à la collection et à la sélection du matériel présenté mais aussi pour la présentation vivante et dynamique sur scène.

**Discutons!**
Les élèves du cours secondaire raffolent des discussions et des débats. Les enseignants avisés profitent de cet attrait pour encourager l'expression correcte, claire et précise. Ces sessions développent également le pouvoir d'écoute, et le respect de la parole de l'autre, surtout dans la participation d'un débat formel.

Une dizaine d'élèves du Secondaire 3, 4, et 5 adoptent le thème suivant:

'Les "mass média": tyrans ou serviteurs?' Quel est le rôle des média d'information? Comment nous serventils? Quelle est leur influence sur nous? Dans une table ronde, un groupe d'élèves tente de répondre à ces questions. Les différents points de vue et les témoignages de toutes couleurs suffisent à démontrer aux parents quelle place importante occupent les 'mass média' dans la vie des adolescents. Ceux-là peuvent constater aussi à quel niveau de langage 'leurs grands' sont rendus. Un sentiment de fierté peut peut-être germer chez les uns et les autres.

**De la salle de classe au monde**
Les messages arrivent fréquemment à la maison disant que le petit écolier ira visiter avec sa classe la laiterie ou le

# bien parler

Marie-Thérèse Charlebois,
Niagara South Board of Education
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Rigolo

'Pourquoi le monde est sans amour?'

jardin zoologique de la ville voisine.

C'est le tour des petits du Jardin, 1ère, 2e et 3e années de s'exprimer sur ce qu'ils ont retiré de leurs visites:

Monsieur le pompier est là sur l'estrade avec son imperméable, ses bottes et son casque-protecteur. Son petit ami énumère maintenant le nom de tous ses vêtements tandis qu'un autre décrit ce que doit faire le pompier en cas de feu. Ou encore une visite au jardin botanique permet à cette grande de 1ère et de 2e année de nommer cinq différentes fleurs et d'y indiquer la corolle, les pétales, la tige et les feuilles. Quoi de plus captivant enfin pour les élèves de 3e que d'aller visiter une manufacture de patates feuilletées! On peut décrire les procédés d'empaquetage; on déclare que les patates sont croustillantes et . . . crouch! crouch! elles tombent sous la dent du petit bout d'homme éloquent!

**'Pourquoi le monde est sans amour?'**
Cette présentation a pris naissance à partir d'un projet de catéchèse en 4e année. Tous les pays du monde – les élèves tiennent en main un grand dessin de la maison typique d'un pays – sont sous la tutelle amoureuse de Dieu le Père. Puis ils avancent au son de la musique, les vieillards, les personnes d'âge mûr, les jeunes couples en vacances, les nouveaux-mariés, les adolescents tapageurs et les bambins rieurs apparaissent tour à tour, tous sont appelés à s'aimer les uns les autres et pourtant . . .

*Moi, je ne sais pas . . . Moi, je ne sais pas*
*Pourquoi le monde est sans amour*

Les pays du monde s'offrent à nos regards; c'est la géographie en français! Enfin, on s'aperçoit que les différentes périodes de la vie se décrivent et se chantent très bien . . . en français!

Peut-on dissocier la langue parlée des autres matières du curriculum? Très difficilement! Les sciences sociales, les sciences naturelles, la catéchèse et les beaux-arts ont eu leur part dans le plan de la soirée. Mais ce n'est pas suffisant; immédiatement après, les parents sont invités à visiter l'exposition de travaux au balcon du gymnase.
On peut y distinguer des travaux d'arts ménagers, des pièces d'arts industriels, des projets de science et des tableaux variés en beaux-arts. Il y a des artistes de tous les âges et capables de satisfaire tous les goûts.

La présentation de ce Gala de Français, c'est l'affaire de tout le monde. Elèves et enseignants, du Jardin à la 13e année ont fait corps ce soir pour proclamer le fait français dans leur milieu scolaire. Ce Grand Gala est devenu aussi un projet de famille. Le petit à la maison revoit 'sa phrase à dire', fait enregistrer sa voix sur une cassette du grand frère; on écoute, on reprend, on s'améliore. Et le soir même, toute la famille se rend pour applaudir l'orateur en herbe. Notons que la communauté francophone s'attend à ce rassemblement annuel. Enfin, les enseignants ont besoin de se faire féliciter pour les efforts qu'ils déploient en vue de promouvoir l'expression orale, et les élèves ont besoin de cette éducation à l'élocution. 'Sois naturel;' dit-on à ce jeune qui s'exécute, 'mais donnes le meilleur de toi-même!'

C'est que la plupart des Franco-ontariens veulent s'épanouir en français d'abord. L'anglais dans l'Ontario viendra par surcroît, nous le savons bien. C'est pourquoi, il faut chanter encore plus fort après ce Gala de Français 1972:

*Belle langue française,*
*Je veux te bien parler.*

# St Anthony's Public School

## Profile of a School/16

St. Anthony's School, Thornhill, translates the expertise of parents and secondary school volunteers into program enrichment. As a result, its 160 students, enrolled in the primary and junior grades, receive instruction in creative drama, yoga, sewing, cooking, and French. Their drama instruction is the responsibility of students from the theater arts course of the nearby secondary school and represents a regular, credit-earning part of their program. A student club in another secondary school provides an individual tutoring service for the children at St. Anthony's.

High on the school's list of priorities is the creation of a homelike atmosphere, and regular classroom exposure of the children to people of various ages is a part of this policy. Family grouping combines the various student age levels, and teachers and parents and secondary school volunteers cover a broad range, from adolescence to middle age. Bright walls, rug-covered floors, and corners furnished with chesterfields and chairs donated by parents provide some of the physical aspects of home.

The children are largely responsible for the way in which they spend their time. Immediately after opening exercises each morning, they plan their day, choosing from a minimum of three subjects for each period. Before going to class, each child submits his plan to his homeroom teacher for approval. A quick comparison of the current plan with those of preceding days shows whether the child is maintaining an appropriate division of time among his various subjects. When his plan is approved, the child is free to proceed.

Each of the school's six staff members has two areas of subject specialization, and all classrooms are designated by subject rather than by grade. St. Anthony's commitment to continuous progress is well served by this arrangement, which puts all materials for a given subject in one room in the charge of a teacher who is completely familiar with the program in that subject for the primary and junior levels.

The role of the parents is by no means confined to volunteer classroom and library service. A parents' steering committee fills all the normal PTA functions and also serves as a two-way communication link between principal and parents. This latter role makes it possible for the school staff to know about and deal with problem situations at the very outset, before they assume unmanageable proportions. By their own choice, members of the steering committee have accepted responsibility for the recruitment and coordination of volunteer aides.

Members of staff at St. Anthony's are quick to draw attention to help received from the Ontario Institute for Studies in Education. They particularly value the guidance in overall planning that enabled them to identify and introduce procedures suited to the accomplishment of their objectives, especially their differential staffing arrangement and the individual program planning by students. The staff members speak highly too of the Institute's programs in conceptual skills, inquiry skills, and K-6 mathematics, which are a part of their regular program.

The school is still in a formative stage and time and circumstance will inevitably influence the pattern of its development. John Elliott, the first principal, left at the end of June to take another position, and with the coming of his successor, St. Anthony's adds another point of view to its store of resources.

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